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STRATEGIC PLAN 2000

Short Range Transit Plan

San Francisco Municipal Railway

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I. Introduction

A. Mission

The San Francisco Municipal Railway strives to provide a convenient, reliable, accessible and safe transit system that meets the transportation needs of all transit users within the City and County of San Francisco.

Muni's Mission Statement conveys who we are, what we do and for whom. The Mission Statement is not intended to be a list of every function the San Francisco Municipal Railway (Muni) performs. Rather, it is a concise statement of Muni's primary function, which is to provide transit service.

B. The Short Range Transit Plan

Every two years, Muni produces a Short Range Transit Plan (SRTP) as the transit system's primary planning document. The SRTP describes the organization, current and planned services, the capital improvement program and the financial operating plan. Muni staff, the San Francisco County Transportation Authority (SFCTA), the Metropolitan Transportation Commission (MTC), the Federal Transit Administration (FTA) and other agencies use the SRTP to clearly see what Muni's top priorities are, what is planned for the future and how Muni intends to accomplish its goals and objectives.

This year, Muni is producing a Strategic Plan in addition to the SRTP. The Strategic Plan 2000 is the policy-level document that is being developed to define what is most important for Muni to do for the future, and to set broad goals, objectives and performance measures for the organization. The SRTP is the support for the Strategic Plan 2000, including detailed information on all aspects of Muni's service, the Financial Plan, and the detailed Capital Improvement Program (CIP). The combined planning effort began in August 1998. An extensive internal process was used to develop the Focus Areas, strategies, goals, objectives and performance measures for the Strategic Plan 2000 and the SRTP, as described below.

The target for adopting the final Strategic Plan 2000, originally scheduled for August 1999, has been moved to December 1999. This extended time frame will give Muni's new General Manager an opportunity to review the work to date and incorporate his vision into the planning process. During this time, the specific performance goals and measures for the strategies in this plan will be developed.

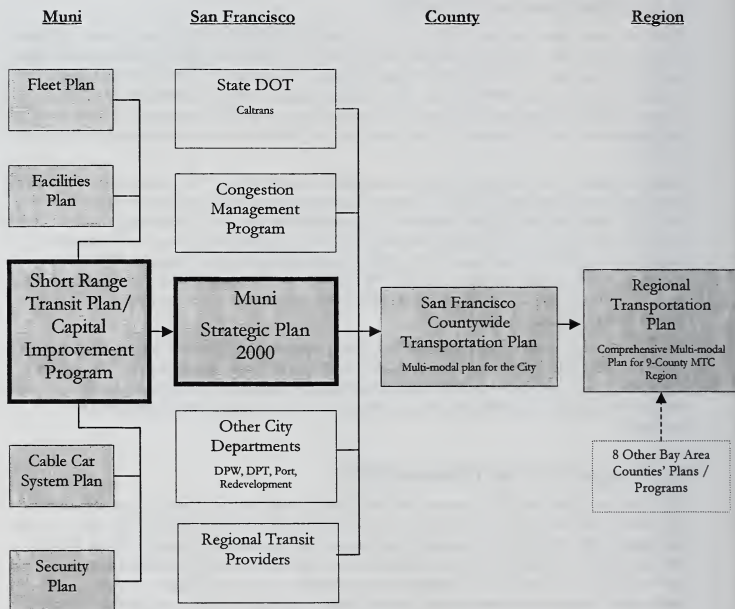
C. Changes from the Previous SRTP

The most significant change from prior SRTPs is that this version is designed to provide the base upon which we will develop and support the new Strategic Plan 2000. Also, with this update, Muni has changed the focus of the document to be issue oriented, providing a basis for future decision-making and action. Attempts have been made to retain all key information contained in the previous versions of the SRTP. However, information has been reorganized to eliminate duplication, link essential concepts, and to simplify the presentation whenever possible. Also, the focus has shifted to the most recently completed fiscal years and the next ten years to keep the emphasis on future actions, informed by recent history.

D. Relation to Other Plans

The SRTP brings together in one document information from the many subsidiary plans prepared by Muni staff to guide Muni's future direction. The SRTP provides the technical background upon which the Strategic Plan 2000 will be built. The SRTP also provides justification, support and prioritization for Muni's capital projects contained within the San Francisco Countywide Long Range Transportation Plan (CTP) and the Regional Transportation Plan (RTP). These relationships are shown in Figure 1.

Figure 1 – Short Range Transit Plan Context



E. Strategic Plan 2000

With the multiple challenges currently facing Muni, the San Francisco Public Transportation Commission (PTC) directed staff to develop a strategic planning document to help address those challenges. To accomplish this, Muni staff is preparing the Strategic Plan 2000, a 10-year plan which links targeted strategies to actions for accomplishing our mission. The primary purpose of Strategic Plan 2000 is to bring our top priorities into focus and provide direction for carrying them out. The plan seeks to strengthen the link between our policy initiatives and the actual delivery of Muni service by establishing long term performance goals and a means to measure progress. Strategic Plan 2000 will serve as a decision-making tool for everyone responsible for delivering quality Muni service, from policy makers to management to the work force. It will demonstrate to our customers that we have a unified approach to improving their service.

Strategic Plan 2000 is organized around six Focus Areas. Strategies, goals and performance measures will guide Muni in making improvements within each Focus Area. Taken together, they describe the overall approach Muni will take to meet the department's mission over the next 10 years.

A **Focus Area** is a broad, high-level area of importance, which encompasses the most significant issues and challenges facing Muni over the next 10 years. These are the areas critical to success in meeting our mission.

Strategies are the steps that must be taken within each Focus Area to meet our mission. They are the methods by which we will strive to make improvements.

The **goals and performance measures** are the tools we will use to assess the effectiveness of the strategies in fulfilling our mission. They should be meaningful and comprehensible to staff, policy makers and the general public. The goals and performance measures should be ambitious, yet feasible, requiring the department to stretch to achieve and maintain them over the 10-year time frame of the plan.

Muni employees at all levels of the organization are involved in the development of Strategic Plan 2000. The Strategic Plan 2000 Steering Committee, composed of senior staff and chaired by a PTC Commissioner, produced the mission statement and Focus Areas. The Strategic Plan 2000 Task Force, a group of Muni Managers and labor representatives, formulated strategies to improve and strengthen Muni's performance in each Focus Area.

Muni staff began the process of developing the Strategic Plan 2000 in September 1998, prior to a new General Manager coming to Muni in April 1999. In the coming months Muni staff will work with the new General Manager, the Task Force, and Performance Groups to develop the key performance measures to provide Muni with the tools to assess the effectiveness of the strategies and track our progress in each of the Focus Areas.

The process was designed with input and interaction from staff at all levels of the organization and from a cross section of disciplines. Numerous avenues for participation for those not directly involved in the process were provided, including a regularly distributed informational project update, an Email account and traditional mail.

The Strategic Plan 2000 Focus Areas and strategies are presented in Figure 2. A description of the major issues in each strategy, which the goals and performance measures will address, is also

provided. The specific measurable goals and performance measures will be presented in the Strategic Plan 2000, which Muni expects to publish in December 1999.

Figure 2 – Strategic Plan 2000 Focus Areas and Strategies

Service Quality

Provide a Reliable Fleet: Provide a sufficient number of reliable vehicles for scheduled service each day and keep them in service for the scheduled span of service.

Increase Operator Availability: Ensure that enough operators are available to provide scheduled service each day.

Design Service to Meet Customers' Needs: Provide a system of services which will take our customers where they want to go, when they need to get there, in the most efficient and effective manner possible.

Manage Lines Effectively: Operate a reliable and predictable service on the street.

Customer Satisfaction & Communication

Know the Customer: Understand who our customers are and what they want Muni to do for them.

Inform the Customer: Provide our customers with regular communication and information.

Interact with the Customer: Engage our customers in an ongoing dialog.

Safety & Security

Improve Safety on Muni Service: Reduce accidents and related safety incidents.

Improve Security on Muni and in Muni Facilities: Increase passenger and employee security.

Increase Health, Safety and Security in the Workplace: Reduce occupational injuries and other incidents that result in lost work time.

Financial Stability

Control Costs: Continue to operate a cost-effective service.

Manage Resources Efficiently: Continue to provide a fiscally efficient service.

Develop Predictable Revenues: Stabilize operating revenue sources.

Employee Development

Improve Internal Communication: Develop an employee communication program.

Promote Training and Career Development: Address Training and Career Development needs.

Strengthen Human Resources: Fill vacant positions in a timely manner.

Infrastructure Preservation & Development

Improve Infrastructure Planning: Manage long-term facility needs more effectively.

Implement a Cost Effective and Efficient Capital Program: Manage capital fiscal resources effectively and efficiently.

Anticipate and Incorporate Technology: Develop a means to budget and plan for the operation and maintenance of increasingly complex technology.

II. System Organization

A. Background

The San Francisco Municipal Railway (Muni) was founded in 1912 as the first publicly owned transit system in the United States, initiating service to areas of the city not served by the existing privately operated transit systems. In 1944, Muni absorbed the privately owned Market Street Railway, which more than doubled the size of the system, and effectively brought all of the transit services within San Francisco under public control.

From 1932 until 1993 Muni was governed by the City's Public Utilities Commission (PUC). In 1993, Proposition M was passed by the City's voters, creating the Public Transportation Commission (PTC) and the Public Transportation Department (PTD), and removing Muni from the authority of the PUC. The PTD is governed by the PTC, and is now the city department responsible for operating Municipal Railway services. Muni also works with other transit providers in the region to coordinate service in and out of the city.

B. Organizational Structure

1. Governance/Policy Making

Unlike most large public transit systems in the United States, Muni is not an independent agency or authority. Muni is a department of the government of the City and County of San Francisco, and thus reports to a variety of policy-making bodies for different issues. This structure also means that many functions normally contained within a transit agency's own organization are handled for Muni by other city departments.

A charter amendment has been placed on the November 1999 ballot to change the governance of the Municipal Railway, with the aim of making Muni more of an autonomous entity. Some of the major provisions of the amendment are to provide a more autonomous governing body for Muni, to ensure improved service through the application of performance standards, and to provide increased managerial, budgeting, spending and hiring autonomy for Muni. The ultimate effect of the successful passage of this amendment is not known at this time.

a. Public Transportation Commission

In 1993, the voters passed Proposition M, creating a five member Public Transportation Commission (PTC) to set the policy direction for Muni. The members of the PTC are appointed by the Mayor. The PTC is responsible for overseeing the day-to-day operation of Muni and establishing basic policies that govern the Municipal Railway's operation. The PTC is the first step in the approval process for many items, including construction contracts, funding applications, service changes, etc. Most of these items then go on to another body within the City and County government for final review and approval.

Also, since Muni is a department of the City and County of San Francisco, policies in many areas that directly affect Muni, such as fares and operating budget, are outside the control of the PTC. Some of these are described below.

b. Mayor

The Mayor's Office reviews Muni's annual operating budget and submits it to the Board of Supervisors for approval as part of the overall budget for the City and County of San Francisco. The Mayor's Office also negotiates all labor contracts for Muni.

c. Board of Supervisors

The Board of Supervisors (Board) approves Muni's annual budget, major service changes, funding applications, construction contracts, labor contracts, and sets Muni's fare policy. The Board also sits as the San Francisco County Transportation Authority, which provides a significant portion of Muni's local funding toward capital projects.

d. Civil Service Commission

All hiring of personnel at Muni is done through the city's Civil Service System, which is overseen by the Civil Service Commission, and is conducted by the staff of the Department of Human Resources (DHR).

e. Chief Administrative Officer (CAO)

Policy for certain other functions for Muni, such as Purchasing, are within the purview of the City's Chief Administrative Officer.

2. Reorganization

Muni has been reorganized numerous times since the last SRTP was released. The latest reorganization occurred in March 1999. The result of these changes is that Muni is now composed of four divisions: Operations, Finance & Administration, Capital Programs, and the General Manager's Office. The primary goal of the reorganization was to combine the Operations and Maintenance Divisions into a unified Operations Division that would bring responsibility for the previously separate operations and maintenance functions for each mode together under one manager, to improve service delivery by strengthening responsibility. For the first time, each mode now has a Modal Manager who oversees both operating and maintenance functions for that mode, and can make decisions to improve daily service delivery closer to the actual operation.

In addition, the reorganization was intended to improve internal communication, increase the level of accountability and limit bureaucracy. System Safety, EEO, Human Resources and Labor Relations have all been placed in the General Manager's Office, indicating a higher profile for these functions. Figure 3 outlines Muni's current organization, including the primary functions of each division.

3. Proposed Organizational Changes

In order to highlight the importance of safety and the relationship to training, the General Manager has proposed creating a new Safety and Training Division, headed by a Deputy Director level position.

Figure 3 - Organizational Structure

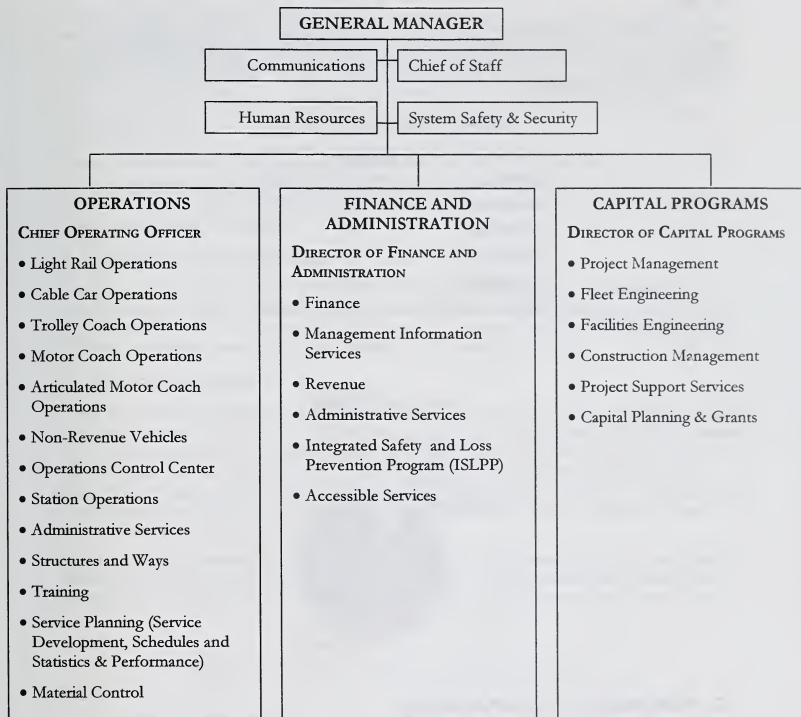


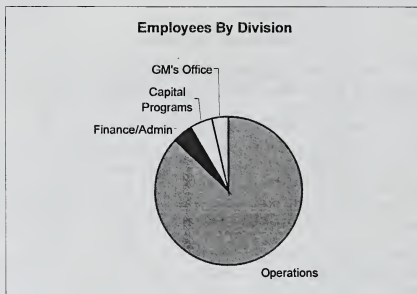
Chart based on 3/16/99 reorganization

4. Staff

Muni has almost 4,200 employees to staff the four divisions listed above. Figure 4 provides a breakdown of the number of employees in each division, including grant-funded positions, as budgeted for FY99/00. By far, the largest single group of employees at Muni is transit operators, with 2,010 budgeted positions.

Figure 4 – Employees by Division

Division	Budgeted Positions	% of Total
Operations	3,644	87.1%
Finance/Admin	184	4.4%
Capital Programs	210	5.0%
GM's Office	148	3.5%
TOTAL	4,186	100.0%



C. Relationship to Other Agencies

1. San Francisco County Transportation Authority

The San Francisco County Transportation Authority (SFCTA) was created by Proposition B in 1989 to administer funds generated by the county's ½-cent transportation sales tax. The members of the SFCTA are the Board of Supervisors. Funding from the sales tax is essential for the planning, design and construction of major transportation projects within San Francisco, and is often used as local matching funds that qualify San Francisco to receive larger state and federal grants. The ½-cent transportation sales tax will expire in 2010, unless it is re-authorized by San Francisco voters.

2. Department of Parking & Traffic

The Department of Parking & Traffic (DPT) is the city department responsible for all traffic engineering and signal design and maintenance in San Francisco. DPT also controls all bus zone locations, bus lane configurations, and other on-street elements crucial to Muni's efficient operation. Muni works closely with DPT to plan and implement projects, and to ensure that Muni's services can operate safely and efficiently on city streets. DPT is governed by the Parking & Traffic Commission (P&TC), which must approve all bus zone changes and other traffic-related changes under DPT's purview.

Among other provisions, Proposition M (1993) enables the Board of Supervisors to combine Muni and the Department of Parking and Traffic (DPT), but to date this provision has not been implemented. The proposed charter amendment being prepared for the November 1999 ballot also contains a provision similar to this.

3. Department of Public Works

The Department of Public Works (DPW) is the city department responsible for designing, constructing and maintaining much of San Francisco's infrastructure, including the street right-of-way (except water, sewer, streetlights and traffic signals). Any major Muni construction project that includes major street construction is usually designed and managed by DPW.

4. Joint Powers Board

The Joint Powers Board (JPB) is the policy body which oversees the operation and administration of the Caltrain commuter rail service, which serves San Francisco, San Mateo and Santa Clara Counties. Each of these three member counties has three representatives on the Board. The San Francisco representatives are one member each from the Mayor's office, the Board of Supervisors and the PTC. Each member county contributes operating and capital funding to Caltrain on a formula basis. San Francisco's contribution to Caltrain's funding does not come out of Muni's budget, rather it is provided through the City and County of San Francisco.

Caltrain's northern terminus is in San Francisco at Fourth & King Streets. This is the most heavily used station on the Caltrain system. For more information on the JPB or Caltrain, please see the Caltrain 20-Year Strategic Plan, available from the San Mateo County Transit District (SamTrans).

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III. Service Plan

A. Description

This section describes the services that Muni provides, with a number of operating characteristics that illustrate Muni's service delivery. It also presents selected performance indicators that are used to gauge Muni's performance. This section focuses on the system as a whole, except in cases where detailed analysis is warranted. After the evaluation, this section discusses proposed changes in Muni service over the next 10 years. For detailed characteristics and performance information at the route level, please see Appendix B.

B. Current Service

1. Service Design Standards

The Municipal Railway's service is structured based on specific service design standards. These standards guide decisions to determine the spacing of routes throughout the city, the frequency of buses and streetcars, the spacing of stops along a line, and the average loads experienced by passengers on vehicles. The standards also guide development of other programs that contribute to improved transit service.

- A. Facilitate multi-destination travel that allows most trips to be made with a maximum of one transfer by maintaining a modified grid route network with a radial grid of lines serving downtown, with circumferential crosstown and feeder lines on a general north/south and east/west orientation at approximately ½ mile spacing throughout the City, except where constrained by geography or the street grid;
- B. All residential locations in San Francisco should be within approximately ¼ mile of a Muni route that operates at least 19 hours per day;
- C. Figure 5 presents the maximum amount of time allowed between vehicle arrivals for the various line types. This is also known as Muni's policy headways. When ridership warrants, more frequent service may be operated than provided by these standards;

Figure 5 – Policy Headways

Weekday	Peak	Base	Evening	Owl
Radial	10	15	20	30
Express	10	--	--	--
Cross-town	15	15	20	30
Feeder	20	30	30	--
Weekend		Base	Evening	Owl
Radial		15	20	30
Cross-town		20	30	30
Feeder		30	30	--

- D. Operate service such that peak period loads do not exceed the maximum load for planning purposes as shown in Figure 6 below, when averaged over the 2-hour peak:

Figure 6 – Load Factors

Vehicle	Maximum Load for Planning Purposes
30' Coach	45
40' Coach	63
60' Coach	94
LRV	119

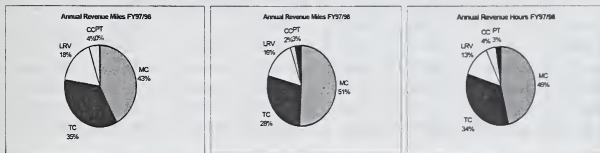
- E. Provide passenger stop spacing of approximately 800-1000 feet on motor coach and trolley coach lines except where there are steep grades (over 10%), and a stop spacing of 1000-1200 feet between stops on LRV surface lines;
- F. Ensure that all new motor coaches and trolley coaches meet ADA requirements;
- G. Expand Metro system accessibility beyond the Key Stops Program;
- H. Provide paratransit services to all persons certified as ADA-eligible, and work with regional providers to facilitate regional paratransit trips;
- I. Construct appropriate transit guideways in major corridors to reduce transit travel time and increase capacity;
- J. Expand transit priority measures on the Transit Preferential Streets network, or elsewhere as needed;
- K. Develop inter-operator fare instruments to facilitate regional travel;
- L. Provide convenient transfer opportunities with regional transit operators;
- M. Provide increased capacity at equal or lower cost by substituting articulated vehicles where loads and frequencies warrant (see Fleet Plan);
- N. Reduce service (without exceeding policy headways) on lines that continuously experience diminished ridership;
- O. Expand proof-of-payment fare collection on Muni Metro to increase system productivity.

2. Service Description

Muni currently operates 80 lines in regular weekday service. Muni directly operates four modes of vehicles: motor coach, trolley coach, light rail (Muni Metro and historic streetcars) and cable cars. In addition, Muni provides paratransit service by contract. Figure 7 shows the basic characteristics of each mode and illustrates the relative contribution of each mode to Muni's overall service delivery.

Figure 7 - Mode Characteristics FY97/98

MODE	LINES	%	VEHICLES	%	ANNUAL UNLINKED TRIPS (97)	ANNUAL UNLINKED TRIPS (98)	% (98)	CHANGE 97/98	ANNUAL REVENUE MILES (97)	ANNUAL REVENUE MILES (98)	% (98)	CHANGE 97/98	ANNUAL REVENUE HOURS (97)	ANNUAL REVENUE HOURS (98)	% (98)	CHANGE 97/98
Motor Coach	54	67.5%	500	47.5%	89,626,408	92,845,139	42.2%	3.3%	12,118,685	12,267,773	50.8%	1.5%	1,327,572	1,360,001	46.4%	2.4%
Trolley Coach	17	21.3%	355	33.7%	80,810,882	77,643,294	35.3%	-4.1%	7,104,652	6,872,485	28.4%	-3.4%	1,007,480	986,821	33.7%	-2.1%
LRV	6	7.5%	158	15.0%	36,738,177	38,898,092	17.7%	5.6%	3,739,458	3,777,707	15.6%	1.0%	368,246	378,362	12.9%	2.7%
Cable Car	3	3.8%	39	3.7%	9,833,555	9,883,055	4.5%	0.5%	520,170	518,303	2.1%	-0.4%	128,185	128,600	4.4%	-0.5%
Paratransit	NA	NA	NA	NA	883,453	883,599	0.4%	-1.1%	811,809	755,249	3.1%	-7.5%	82,506	75,722	2.6%	-8.0%
TOTAL	80	100.0%	1,052	100.0%	218,102,475	220,153,149	100.0%	0.9%	24,294,774	24,221,517	100.0%	-0.3%	2,914,969	2,925,536	100.0%	0.5%

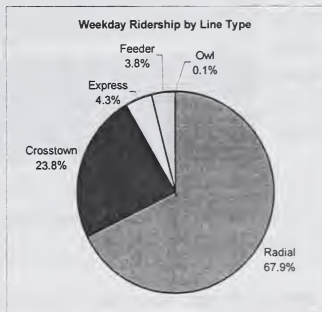


Source: National Transit Database (FTA) FY97/98

Figure 8 - Weekday Ridership By Line Type

Line Type	Weekday Ridership	Percent
Radial	463,175	67.9%
Crosstown	162,729	23.8%
Express	29,509	4.3%
Feeder	26,220	3.8%
Owl	868	0.1%
TOTAL	682,501	100.0%

Source: National Transit Database (FTA) FY97/98



Muni operates five types of lines:

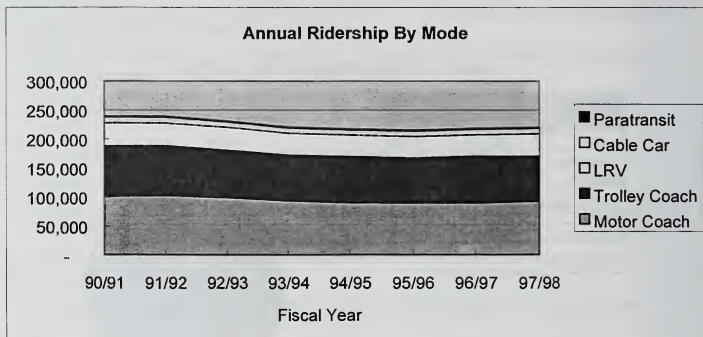
- Radial – Between the neighborhoods and downtown
- Express – Peak hour, peak direction between the neighborhoods and downtown
- Cross-town – Between neighborhoods across the city, without going downtown

- Feeder – Within a neighborhood, feeding radials and cross-town lines
- Owl – Special routes that operate between 1am and 5am.

Figure 8 shows the distribution of trips between these five types of lines for an average weekday. Figure 9 shows the ridership trends by mode over the last eight years. Note that because of the scale of the graph, and the relatively low volume of paratransit ridership compared to other modes, paratransit ridership appears as a line on the chart, instead of as a shaded field. Appendix B shows the average daily ridership for each Muni line.

Figure 9 – Annual Ridership by Mode (000s)

Mode	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98
Motor Coach	101,230	102,740	99,172	93,994	90,516	89,896	89,827	92,845
Trolley Coach	87,018	85,864	81,808	78,752	79,511	77,807	80,811	77,643
LRV	40,044	39,034	39,332	37,615	37,178	36,728	36,738	38,898
Cable Car	10,642	10,657	9,606	9,555	8,990	9,617	9,834	9,883
Paratransit	584	727	824	851	898	921	893	884
TOTAL	239,518	239,022	230,742	220,767	217,093	214,969	218,103	220,153



3. Service Changes Since Last Short Range Transit Plan

a. Treasure Island Service – 108-Line (1997)

Muni assumed responsibility for operating transit service between San Francisco and Treasure Island, effective in December 1996. Initially, Muni contracted with AC Transit to operate the service. Muni began directly operating service on the 102-line to Treasure Island in March 1997, which was later renamed the 108-line in April 1997.

b. 38L-Geary Limited Saturday Service (1997)

In response to passenger requests, Saturday service was initiated on the 38L-Geary Limited beginning August 23, 1997. Saturday service was changed to the weekday service pattern, with half of all trips during the daytime operating as limited-stop coaches.

c. Sansome Transit / Commercial Lane (1997)

On October 1, 1997, Muni implemented route changes on the 12, 15, 30X and 42-lines to use the new Sansome Street Transit/Commercial Lane in the Financial District. This project was a Transit Preferential Streets (TPS) project created to allow the four Muni lines noted above to avoid peak hour congestion caused by back-ups from the Bay Bridge. Initial results show that this project has reduced delays on these lines significantly – up to 20 minutes per trip in the peak hour, on average.

d. New LRVs (1998)

The entire fleet of 128 Boeing Standard Light Rail Vehicles (SLRV) is being replaced with new LRV2 light rail vehicles built by Breda. Delivery of the first order of 77 LRV2 cars began in 1996, deliveries continued through 1998, with testing and acceptance continuing through 1999. A total of 136 LRV2s will be in service by early 2001, allowing retirement of the last Boeing SLRV cars.

e. Inauguration of E-Embarcadero service on the Muni Metro Extension and opening of the Muni Metro Turnback (1998)

Service on the Muni Metro Extension (MMX) was initiated on January 3, 1998 with the E-Embarcadero shuttle light rail line between the Fourth & King Street Caltrain Station and the Embarcadero Muni Metro Station. On August 22, 1998, through service onto the MMX was initiated with an extension of the N-Judah line over the MMX to the Caltrain Terminal, at which time the E-line was discontinued. Also on January 3, 1998, the Muni Metro Turnback (MMT) was put into operation east of Embarcadero Station, which allows the turnback of trains outside of the passenger loading area in Embarcadero Station. Four Muni Metro lines operate into the pocket tracks in the turnback, with the N-Judah line operating through the turnback to the Folsom Street portal of the subway, and onto the MMX on the surface in the median of The Embarcadero.

f. Proof-of-Payment Fare Collection (1998)

Muni began limited proof-of-payment fare collection in 1994 at two stations on the M-Ocean View line. On January 3, 1998, the E-Embarcadero line was inaugurated as Muni's first proof-of-payment line. Proof-of-payment was extended to the entire N-Judah line on August 22, 1998. With proof-of-payment, there are no operators in the second car of two-car trains, and roving fare inspectors check passengers for valid tickets, passes or other fare media.

g. 15-Third Second Street Reroute (1998)

On June 13, 1998, the southbound 15-line was rerouted onto Second Street from First Street, to avoid peak hour congestion caused by back-ups from the Bay Bridge. This project was the second stage of the Sansome Street Transit/Commercial Lane.

h. Advanced Train Control System-ATCS (1998)

On August 22, 1998, Muni began operation of all trains in the Muni Metro subway using the SELTRAC Advanced Train Control System (ATCS) installed by Alcatel. This system is a

communication-based train control system, and replaces the previous fixed block signal system. Full implementation of all software upgrades to this system (expected in Summer 2000) will allow closer spacing of trains in the subway, increased capacity, and enhanced safety.

i. N-Judah Extension (1998)

The N-Judah LRV line was extended from Embarcadero Station to the Caltrain Terminal at Fourth & King Streets on August 22, 1998, operating over the MMX, and replacing the E-Embarcadero shuttle.

j. 32-Embarcadero (1998)

Concurrent with the initiation of E-line LRV service along the Embarcadero on August 22, 1998, service on the 32-Embarcadero motor coach line was discontinued between the Ferry Building and the Caltrain Terminal at Fourth & King Streets.

k. Caltrain Express Bus Service Consolidation (1999)

The Caltrain Express Bus services (80X/81X/82X-lines) are funded entirely by the Peninsula Corridor Joint Powers Board (JPB). Muni and the JPB have begun restructuring service on the Caltrain Express Bus lines, in response to lower demand for express bus services following the extension of the N-Judah line to the Caltrain terminal. Accordingly, on June 12, 1999, Muni consolidated the 80X and 82X-lines. Discontinuance of the 81X-line is being considered.

C. Ten Year Operations Plan

1. Planned Changes (1999-2004)

This section describes proposed operational changes anticipated for the next five years. These are projects for which a service plan has been developed, and the necessary engineering, construction, or procurements are underway. Figure 10 illustrates the major service changes planned, and Figure 11 summarizes the impacts of these operational changes on service levels (revenue miles and hours). The effect on peak vehicle demand is shown in Figure 19 in Chapter IV - Capital Improvement Program, beginning on page 31.

Figure 11 shows system-wide operating data for the current fiscal year (FY98/99), the previous two fiscal years, and projections for the next 10 fiscal years. This data is shown in conjunction with summary information on major service changes, to illustrate the reasons for specific changes in operating data.

a. Caltrain Express Bus Service (1999)

Following the June 12, 1999 consolidation of the 80X and 82X-lines, Muni and the JPB are considering discontinuance of the 81X-line for Fall 1999. The Caltrain Express Bus Service is funded entirely by the Peninsula Corridor Joint Powers Board (JPB).

b. 33-Stanyan Reroute to Serve BART (1999)

In late Summer or early Fall 1999, Muni expects to reroute the outbound portion of the 33-Stanyan line to serve the 16th Street Mission BART Station. This change would reroute the 33-line to use

Mission Street between 18th and 16th Streets, instead of South Van Ness. This change will provide a closer connection for passengers transferring between the 33-line and BART.

c. 56-Rutland Reroute (1999)

In Fall 1999, Muni expects to change the 56-line route in Visitacion Valley to serve Visitacion Valley Middle School.

d. Additional 19-Polk Service to South of Market (1999)

In Fall 1999, Muni will move the current short-line terminal for the 19-Polk line from Mission Street to Brannan Street, extending many 19-line trips into the South of Market area.

e. Ferry Terminal Abandonment (2000)

In early 2000, Muni expects to abandon use of the Ferry Terminal off-street bus turnaround at Steuart & Mission, and to move the terminals for the eleven (11) lines using this terminal to new curb side terminals on the surrounding streets. This is being done to allow development of the current Ferry bus turnaround as a hotel, which is expected to produce a revenue stream to Muni. This project requires some overhead line modifications to be made to allow new routings for several of the lines.

f. F-Market Extension to Fisherman's Wharf (2000)

Muni will extend the F-Market streetcar line from the Transbay Terminal to a new terminal in Fisherman's Wharf, via lower Market Street and The Embarcadero. This extension is scheduled for early 2000. Construction of the trackway and overhead lines for the F-line extension and the surrounding Embarcadero Roadway is proceeding. Figure 10 illustrates the F-line extension.

g. 32-Embarcadero Discontinuance (2000)

In early 2000, when the F-Market extension to Fisherman's Wharf opens, the remaining portion of the 32-Embarcadero motor coach line will be discontinued between the Ferry Building and Fisherman's Wharf. The replacement service offered by the F-line will be more frequent, operate in an exclusive right of way, and have a longer span of service.

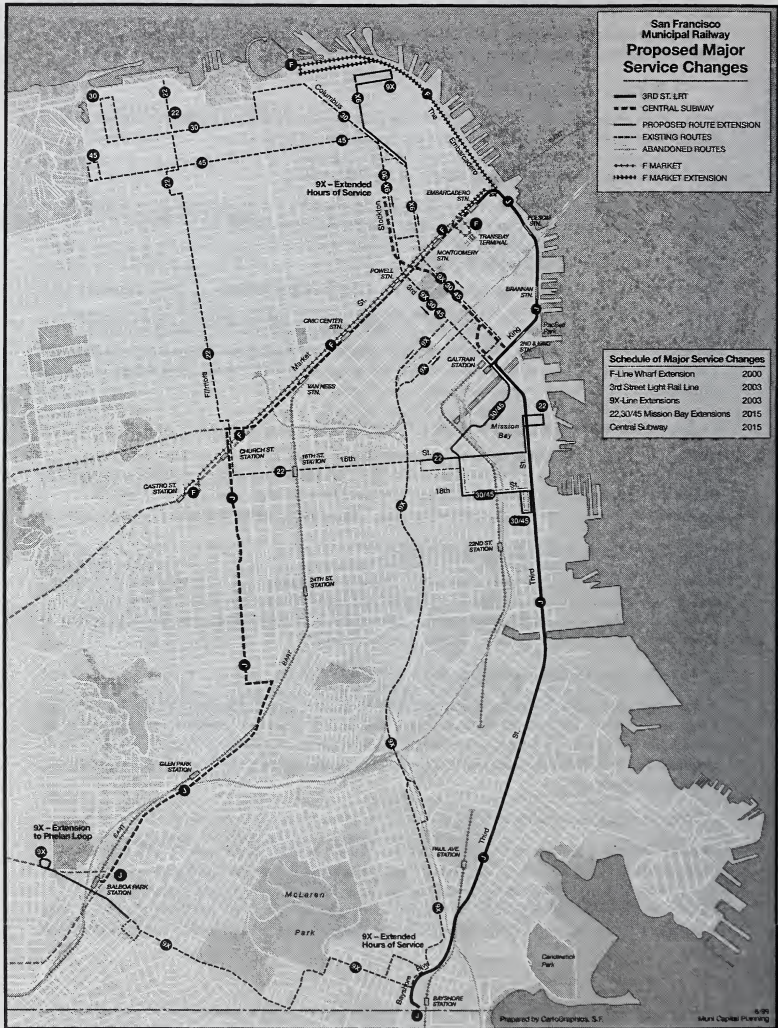
h. 6-Parnassus Downtown Terminal Change (2000)

At the same time as the F-Market is extended to Fisherman's Wharf, the downtown terminal for the 6-Parnassus line will be changed from the Ferry Terminal to Transbay Terminal, to retain service on two Market Street lines to Transbay Terminal. Prior to the start up of the F-line, the 6-line terminated at Transbay Terminal, and had been temporarily moved to the Ferry Terminal when the F-line began operation.

i. PacBell Ballpark Service (2000)

In April 2000, the San Francisco Giants will begin playing baseball at the new PacBell Park in the South of Market area, replacing Candlestick Park in Hunter's Point. PacBell Park is served directly by the Muni Metro, Caltrain and a number of bus lines. Special trains will be operated to the ballpark on Muni Metro. A shuttle bus operation between Market Street and Townsend Street will supplement Metro Ballpark service. Approximately 10,000 riders are expected to use Muni for each game.

Figure 10



**Figure 11 - Operating Data for Anticipated Service Changes
FY 96/97 to FY08/09
(All numbers in Thousands)**

	Actual (1)	Estimate	Projected (2)										
MODE	FY96/97	FY97/98	FY98/99	FY99/00	FY00/01	FY01/02	FY02/03	FY03/04	FY04/05	FY05/06	FY06/07	FY07/08	FY08/09
Motor Coach													
Revenue Miles	12,119	12,298	12,788	12,695	12,695	12,695	12,219	12,219	12,219	12,219	12,219	12,219	12,219
Revenue Hours	1,328	1,360	1,500	1,490	1,490	1,490	1,432	1,432	1,432	1,432	1,432	1,432	1,432
Peak Vehicles	364	364	364	361	361	361	361	348	348	348	348	348	348
Trolley Coach													
Revenue Miles	7,105	6,872	7,453	7,453	7,453	7,453	7,453	7,453	7,453	7,453	7,453	7,453	7,453
Revenue Hours	1,007	987	1,075	1,075	1,075	1,075	1,075	1,075	1,075	1,075	1,075	1,075	1,075
Peak Vehicles	258	258	258	258	258	258	258	258	258	258	258	258	258
Light Rail													
Revenue Miles	3,739	3,778	4,541	4,769	4,769	4,769	5,647	5,647	5,647	5,647	5,647	5,647	5,647
Revenue Hours	368	378	448	486	486	486	554	554	554	554	554	554	554
Peak Vehicles	104	104	104	129	129	129	147	147	147	147	147	147	147
Cable Car													
Revenue Miles	520	518	552	552	552	552	552	552	552	552	552	552	552
Revenue Hours	129	129	138	138	138	138	138	138	138	138	138	138	138
Peak Vehicles	26	26	26	26	26	26	26	26	26	26	26	26	26
TOTAL													
Revenue Miles	23,483	23,466	25,334	25,469	25,469	25,871	25,871	25,871	25,871	25,871	25,871	25,871	25,871
Revenue Hours	2,932	2,854	3,161	3,189	3,189	3,189	3,199	3,199	3,199	3,199	3,199	3,199	3,199
Peak Vehicles	752	752	752	774	774	774	792	779	779	779	779	779	779
Service Changes													
F-Embarcadero Startup (HLRV)													
Revenue Miles			228										
Revenue Hours			38										
Peak Vehicles			+9										
32-Embarcadero Discontinue (MC - standard)													
Revenue Miles			-93										
Revenue Hours			-10										
Peak Vehicles			-3										
3rd St LRT Startup (LRV)													
Revenue Miles								878					
Revenue Hours								68					
Peak Vehicles								+18					
3rd St Bus Changes (MC - articulated)													
Revenue Miles								-476					
Revenue Hours								-58					
Peak Vehicles								-13					

Service Changes														
F-Embarcadero Startup (HLRV)														
Revenue Miles			228											
Revenue Hours			38											
Peak Vehicles			+9											
32-Embarcadero Discontinue (MC - standard)														
Revenue Miles			-93											
Revenue Hours			-10											
Peak Vehicles			-3											
3rd SLRT Startup (LRV)														
Revenue Miles														
Revenue Hours														
Peak Vehicles														
3rd St Bus Changes (MC - articulated)														
Revenue Miles														
Revenue Hours														
Peak Vehicles														

NOTES

(1) Actual figures for vehicle miles and hours based on service actually operated

(2) Projected figures based on estimated FY98-99 figures, adding or subtracting expected changes due to service changes.

(3) Does not include paratransit services.

j. Assign New Articulated Trolley Coaches to Lines with High Ridership (2001-2002)

Thirty (30) additional articulated trolley coaches are scheduled to be delivered in 2001 and 2002, replacing an equivalent number of standard trolley coaches. These coaches have been ordered to better meet demand on lines experiencing high ridership. The following lines are being considered for assignment of the new articulated trolley coaches; 49-Van Ness/Mission, 30-Stockton, 45-Union/Stockton, 5-Fulton, or 22-Fillmore.

k. Third Street Light Rail Initial Operating Segment (2003)

The Third Street Light Rail Line is a major vehicle and infrastructure project, and is currently in the design and engineering phase. The project is slated to begin construction in 2000, for completion and initiation of service in Fall 2003. The light rail line will replace the 15-Third motor coach line, and will have major impacts on Muni's service along the eastern side of the city. The line will extend from the end of the MMX at Fourth & King Streets, across the bridge at Fourth Street, down Third Street to a terminus adjacent to the Bayshore Caltrain Station. The line will operate largely in reserved right-of-way in the center of Third Street. Stations will be spaced approximately 1/4-1/3 mile apart, and the line will be operated as a proof-of-payment line.

The Third Street project is being designed in concert with a community revitalization effort, supported by numerous city departments, nonprofit agencies, and other organizations. Figure 10 illustrates the changes planned with the implementation of the light rail line, including the bus line changes anticipated. Figure 11 illustrates the effect on revenue hours and miles of the light rail implementation. With the initiation of Third Street LRV service the following service changes will occur:

- The 15-Third line will be discontinued as through motor coach service, and replaced by new light rail service. The Third Street Light Rail Line is expected to be operated as an extension of the J-Church line, operating over the MMX and connecting to the new Third Street Light Rail line at Fourth & King Streets.
- The portions of 15-Third not covered by the new light rail line will be served by some or all of the 9, 9X, 9AX, 9BX, 36 and 43 Lines. The goal is to maintain direct motor coach service between City College, Visitacion Valley and Chinatown with service operating 20-hours-per-day, seven days per week. It is likely that the 9X, 9AX and 9BX-lines will be extended to operate to City College on the southern end, and to Fisherman's Wharf on the northern end. Saturday and Sunday service will be added, and the basic service will operate between 5am and 1am daily.
- The 54-Felton line in Bayview and Hunter's Point may be partially rerouted.

l. Assign Articulated Motor Coaches to Lines with High Ridership (2003)

When the Third Street Light Rail Initial Operating Segment opens in 2003, approximately 13 articulated motor coaches will be available for reassignment from the 15-Third line to other lines experiencing heavy ridership demand. The current candidate lines to receive the additional articulated motor coaches are the 9X/9AX/9BX-San Bruno Expresses, 30X-Marina Express, 42-Downtown Loop, and the Richmond District Expresses.

2. Proposed Changes (2005-2009)

The operational changes listed below are anticipated within the ten-year time frame of this plan, but not within the first five years. Specific service plans have not been developed for these projects, and engineering, construction or procurement is not yet underway.

a. Mission Bay Trolley Coach Expansion

Sometime between 2005 and 2009, Muni will begin work on several trolley coach extensions (see Figure 10). As employment and residential development increase within the Mission Bay area, Muni will make service changes to serve the development and to accommodate new ridership demands. The expected changes include:

- Extend 30-Stockton and/or 45-Union/Stockton trolley coach lines from their existing terminal at the Fourth & King Caltrain Station, through Mission Bay, and over a portion of the current 22-line on Potrero Hill to a new terminal on Third Street in Mission Bay.
- Reroute 22-Fillmore onto 16th Street east of Kansas Street to a terminal on Third Street in Mission Bay.
- These service changes may require 10 additional standard trolley coaches. The impact on annual revenue hours and miles is not known at this time.

b. Increased Ridership

Increased ridership (increased loads) may warrant additional service. As ridership trends develop, future editions of this document will include specific service proposals, including the impact on revenue hours, revenue miles and vehicle demand and associated capital and operating funding needs.

3. Future Service Proposals

The operational changes listed below may be implemented outside of the ten-year time frame of this plan, or may be proposals that have not been developed beyond the conceptual stage. Specific service plans have not been developed for these potential changes. Many of these proposals will require extensive capital improvements. It is anticipated that the lead-time for the capital portion of such projects makes it unlikely that any of the changes requiring major capital projects would occur before 2009. Projects not requiring capital projects could occur on a quicker schedule. Until specific service plans are developed, the impacts on peak vehicle demand, revenue hours and revenue miles cannot be estimated.

a. Central Subway

As a future phase of the Third Street Light Rail Line, Muni has proposed extending the line into a new subway, generally in a north-south alignment under Third Street to Market Street, then under Geary to Stockton, and under Stockton into Chinatown to approximately Sacramento Street. This subway could accommodate through-routing or shared operation with an eventual Geary Street subway for any future Geary light rail line, and is currently planned for 2015 implementation. The Central Subway was included in the environmental documentation for the Third Street light rail line.

b. Additional Mission Bay LRV Service

As employment and residential development increase within the Mission Bay area, Muni may add LRV service to serve the development and to accommodate new ridership demands. The expected changes include:

- Additional LRV service may be warranted on some portions of the Third Street Light Rail Line. This is anticipated to be an extension of the N-Judah line to Mariposa Street.
- Additional LRV service may be warranted to the Caltrain Terminal at Fourth & King Streets. This is anticipated to be an extension of the L-Taraval line.

c. Third Street Light Rail – Future Phases

Muni anticipates future extensions on the southern end of the Third Street Light Rail line. Several have been proposed, but the most likely would be:

- Extension to Balboa Park BART via Visitacion Valley and Geneva Avenue
- Extension to Candlestick Park

d. E-Embarcadero Light Rail Line

As part of the F-Embarcadero extension to Fisherman's Wharf, connecting tracks are being built on The Embarcadero between the F-Market tracks north of Mission Street, and the MMX tracks south of Folsom Street. These tracks give Muni the ability to operate a historic streetcar service along the entire waterfront, from Fisherman's Wharf to the Caltrain Terminal at Fourth & King Streets.

e. South of Market Service

The South of Market area has been experiencing significant growth in employment, housing, and development of major regional traffic generators, such as Multimedia Gulch (Second Street), the new PacBell Ballpark, Moscone Center, Yerba Buena Gardens and the Yerba Buena Center. Muni would like to do a comprehensive study of the service to the South of Market area, in order to assess if our service pattern in the area should change in order to better serve changing travel patterns. Changes resulting from this study could be implemented quickly, provided that no additional vehicles or resources are needed.

f. Rail Corridor Development

In addition to light rail service in the Bayshore corridor, three other corridors have been identified in the San Francisco County Transportation Authority's Four Corridor Plan for potential future light rail service: Geary, North Beach and Van Ness. Additional light rail service to these areas will depend upon:

- Completion of the Central Subway Project.
- Vehicle availability, storage capacity and maintenance facilities.
- Availability of future capital and operations funding.
- Community support for the projects.
- Viable service plans.

The Geary rail corridor project would include several connections into the Central Subway, which the Geary line would use in the downtown area. The Geary line would also include a subway under Folsom Street extending east of Third Street, to access the Transbay Terminal area.

g. Presidio Trolley Coach Extension

The National Park Service has included a proposal to extend the 41-Union and 45-Union/Stockton trolley coach lines into the Presidio National Park as part of their transportation planning documents. This extension is not currently included in Muni's Capital Improvement Program.

h. 71-Haight/Noriega Electrification

Muni's Trolley Coach Extension program includes a proposal to convert the 71-Haight/Noriega line from motor to trolley coach operation as the highest priority line for conversion. This may include the incorporation of the 7-Haight line into the 71-line. This extension has been investigated in the past, but was not taken beyond the community outreach stage.

i. Cable Car Extension to Fisherman's Wharf

Muni's Cable Car Plan includes a proposal for extending the Powell/Mason (59) cable car line approximately two blocks north of the current terminal at Bay & Taylor.

j. 33-Stanyan Extension over Potrero Hill and 48-24th Street/Quintara on Cesar Chavez

In an effort to serve the expanding uses along Cesar Chavez Street, Muni may consider extending the 33-Stanyan over the current route of the 48-line between Potrero Avenue and Third Street, and moving the 48-line to serve Cesar Chavez Street. This project would require construction of overhead lines on the Potrero Hill route to allow the 33-line to operate this route.

k. Combine 6-Parnassus and 7-Haight, and extend to West Portal

In an effort to provide greater vehicle utilization and better route connectivity, Muni may consider combining portions of the 6-Parnassus and 7-Haight lines, and extending the western end of the 6-line to West Portal.

4. Other Service Initiatives

a. NextBus

Muni is conducting a demonstration of the NextBus system, which is a real-time passenger information system. The test is being conducted on the 22-Fillmore line. Through a Global Positioning System link between buses and an LED indicator in bus shelters, NextBus informs passengers of the approximate arrival of the next two buses. The test is scheduled to run from June 1999 through December 1999.

b. Alternative Fuels

Currently, 52 percent of Muni's fleet is electrically-powered, and 58 percent of all unlinked trips occur on electric vehicles. Further, 52 percent of all revenue service hours are operated by electrically-powered vehicles.

Muni will conduct a test of 4 vehicles using alternative fuels; two powered by Compressed Natural Gas (CNG), and two diesel/electric hybrids. Muni will procure the vehicles in FY99/00, and evaluate the vehicles' performance in time to feed into the next procurement of motor coaches between 2000 and 2002.

c. Bikes on Buses

With capital funding provided by the Bay Area Air Quality Management District for bike rack purchase, Muni conducted a demonstration project of Bikes on Buses on the community service lines served by the fleet of Orion 30' buses. The project report was published in January 1999. The demonstration did not show a high demand for bike rack services on the Muni lines tested. Though the installed bike racks will remain on the Orion fleet, no further installations are currently planned.

d. Van Service

Muni has been asked on numerous occasion to use small vans to replace standard buses in the evening on lightly traveled lines to reduce noise and operating costs. Muni has investigated the use of vans, and has identified the following issues with their use.

- Van capacity is insufficient to meet the ridership demands on most Muni lines, even into the evening hours.
- Providing a separate fleet of vans for evening service increases Muni's operating and maintenance costs, as the vans would not replace existing vehicles, but would be an additional fleet requiring additional maintenance, parts and facility capacity.
- Positioning vans to replace buses for late-evening service would add deadheading and other operating costs.
- Platform costs for vans are equivalent to standard coaches, as the primary cost in providing van or bus service is the cost of the operator, which remains the same regardless of vehicle size.

D. Accessible Services Program

1. Description

The purpose of the Accessible Services Program is to ensure that everyone is able to use public transit. The main components of this program are:

- Including accessibility features on fixed route vehicles and at stops; and
- Providing door-to-door paratransit service for those unable to use Muni's fixed route service.

Muni staff work with the Muni Accessibility Advisory Committee (MAAC) and the San Francisco Paratransit Coordinating Council (PCC) on Muni accessibility issues and paratransit issues.

2. Bus Service

Accessible bus service is currently provided on 38 motor coach and trolley coach lines. Muni's standard trolley coaches are not currently accessible, but this fleet will be replaced between 2001 and 2002, at which time the entire bus fleet (motor coach and trolley coach) will be accessible.

In order to meet ADA requirements, Muni has the following vehicle accessibility standards that are applied to all new motor and trolley coach purchases:

- All vehicles must be wheelchair lift equipped.
- Have kneeling capability; the ability to lower the front end of vehicle to assist passengers in reaching the first step.
- Provide two wheelchair securement areas per vehicle.
- Provide extra poles and stanchions.
- Have the ability to accommodate talking signs.

Muni staff coordinate with the Department of Public Works for construction of curb cuts along accessible routes and at bus stops throughout the city.

3. Muni Metro Service

The five-line Muni Metro system has become increasingly accessible in recent years, through the construction of accessible wayside platforms and lifts, and other ongoing accessibility projects. All Muni Metro subway stations have high level platforms at carfloor height, and are fully accessible by elevator. In order to make on-street stops accessible, either high level accessible wayside platforms or wayside lifts have been constructed, as part of the ADA-mandated Key Stops program. All new Muni Metro surface stations on the MMX incorporate full accessibility features including wheelchair access, accessible signage and tactile warning edges. Upon completion of the Key Stops program, Muni intends to pursue accessibility improvements at stops beyond those mandated by the ADA Key Station requirements.

The new Breda LRV2s incorporate many accessibility improvements, including two wheelchair securement areas, widened aisles, extra stanchions, and a horizontal gap filler between the vehicle door and the platform edge.

All stations on the new Third Street Light Rail Line will be constructed as fully accessible stops.

4. F-Market/Embarcadero

The F-Market streetcar line has been made accessible through the construction of wayside platforms at carfloor level and wayside lifts. On portions of the system existing prior to 1991, Key Stops have been made accessible. On new portions of the line constructed after 1991, all stops have been constructed as accessible stops with carfloor level platforms or wayside lifts. All stops currently under construction on The Embarcadero for the F-line extension will be fully accessible.

5. Service Issues

The following accessibility related service issues have been identified:

Issue: Achieve at least a 90 percent reliability of lifts and kneeling features.

Resolution: In FY99/00 budget, increase spare parts and maintenance positions dedicated to lift maintenance.

Issue: Work with the community (including the disabled community) to minimize the impacts on neighborhoods of Metro accessible Key Stop design and construction.

Resolution: Muni Capital Programs and Accessible Services are working with the community, DPT and Muni's MAAC on an ongoing basis to resolve these issues on a case-by-case basis.

Issue: Continued marketing strategy including expanded travel training for wheelchair users who have never used transit before.

Resolution: Accessible Services staff are devoted to travel training

Issue: Announce stops at least at transfer points and major destinations, as well as announcing lines and destinations to intending blind and low-vision passengers at stops served by multiple lines, as required by ADA.

Resolution: Digitized Voice Annunciation Systems (DVAS) are being procured on all new Muni vehicles. This will allow all ADA-required announcements to be made automatically, without driver intervention. Additional training is being provided to operators.

Issue: Expand operator sensitivity training, with an emphasis on service to seniors.

Resolution: Additional training is being provided to operators.

6. Facility Accessibility

Major goals in the area of accessibility of Muni facilities include:

- Incorporate accessibility features into all new facility projects.
- Modify all existing facilities to provide reasonable accommodations for employees.
- Provide accessibility for the public to all public areas of Muni facilities.

7. ADA Paratransit Service

Paratransit services are door-to-door van and taxi services provided by Muni to persons with disabilities who are unable to utilize bus and light rail service some or all of the time. The paratransit program is administered by a paratransit broker under contract to the City which is critical to enabling Muni to maintain compliance with the Americans with Disabilities Act and to meeting the needs of over 13,000 registered paratransit consumers. The paratransit broker manages subcontracts with paratransit service providers, monitors service quality, administers client eligibility, manages the sale of fare instruments, and acts on behalf of the Public Transportation Department as the principal customer service representative for paratransit services. Services are provided to persons certified eligible according to federal eligibility criteria established by the Americans with Disabilities Act. Paratransit services include:

- **On-call Taxi Services:** Curb-to-curb services provided by nine taxicab companies to persons with ambulatory disabilities and wheelchair users. Service is available 24 hours a day, seven days a week for any trip purpose with no trip limits for fully eligible riders. Fares are paid with taxi scrip, which is available to qualified users at 10 percent of its face value. In addition, ramp taxi services are available to wheelchair users who are unable to independently transfer into a standard taxicab.
- **Lift Van Services:** Door-to-door services requiring advance reservations provided to individuals using wheelchairs and requiring a level-change device. Service is available 24 hours a day, seven days a week for any trip purpose with no trip limits for fully eligible riders. Fares are paid with either a Fast Pass or per trip tickets.

- **Group Van Services:** Group van services operated in coordination with social services agencies for ADA eligible clients going to a common destination such as a senior center, nutrition site, or Adult Day Health Center, on a routine, pre-scheduled basis Monday through Friday. Payment to the group van operators is calculated based on average daily ridership.

8. Regional Transit Connection Discount Cards

The Regional Transit Connection Discount Card Program is the regional program in which discount eligibility cards for the disabled are issued. Each Bay Area transit operator issues cards, which are honored by all other operators.

9. Coordinating Fixed Route and Paratransit Services

Coordination of fixed route and paratransit services is provided through the Muni Accessibility Advisory Committee (MAAC), the Paratransit Coordinating Council (PCC), and by the paratransit broker staff.

10. Paratransit Debit Card Program

Muni is implementing a debit card project to replace taxi scrip as a fare collection mechanism in the Paratransit Taxi program. A debit card program will improve capabilities for trip monitoring and verification, provide trip approval in close to real time, and will also streamline and reduce the administrative processes associated with taxi scrip transactions and trip invoicing. Debit cards are also easier to handle for senior and disabled consumers who will no longer have to handle bulky books of taxi scrip or complete trip reports after each taxi trip. In a fully implemented debit card program, approximately 8,000 paratransit taxi customers will conduct fare transactions by utilizing a hand-held debit card inscribed with a Photo ID that will be swiped through mobile data terminals in taxi vehicles.

Muni and the paratransit broker have implemented a pilot program at one of the taxicab providers and are now working with a consultant to develop the parameters and system design for a system-wide expansion of this program. Feedback from the primary stakeholders in the program, including paratransit riders, taxicab drivers, and taxicab companies, are being incorporated. Currently, five San Francisco taxicab companies participate in the program, although it is anticipated that this number will increase significantly in the year 2000 as a result of recent legislation requiring all taxicab color schemes to meet minimum requirements set by the city for participation in the program.

Muni will undergo a specification and procurement process for debit card equipment beginning in the Fall of 1999, and will begin installation in the Spring of 2000 in taxicab vehicles, at taxicab companies, and at the paratransit broker's office. It is anticipated that the debit card equipment will be leased through the paratransit broker to taxicab companies at a reduced rate. Installation will begin with taxicab companies that are currently under contract to provide paratransit service and once completed, additional taxicab companies in the city will be phased in. Muni anticipates final implementation of the debit card program in December 2000.

E. Transit Preferential Streets Program

Muni participates in San Francisco's Transit Preferential Streets program (TPS), which is an inter-departmental program to apply transit priority treatments to streets with a high-volume of rail vehicles and buses, in order to reduce delays to transit services. The program was established by the Board of Supervisors in 1973, when the Board passed the Transit First Policy. The Transit

Preferential Streets Network was established to define the streets on which improvements could be concentrated. The network was developed based on transit vehicle frequencies, passenger ridership levels, and other factors. The program consists of a number of elements:

- Exclusive transit guideways – approximately 3 miles of exclusive transit guideways within the street right-of-way for Muni Metro and cable car operation
- Transit Priority Lanes – approximately 11 miles of bus lanes
- Signal Priority – approximately 24 locations on Metro and trolley coach lines
- Bus Stop Improvements – bus bulbs and boarding islands throughout the system
- Auto turn restrictions and other traffic engineering changes – selected locations
- Establishing Transit Centers as nodes where two or more Transit Preferential Streets intersect, and encouraging lowered parking requirements at new developments adjacent to Transit Centers.

As new light rail lines are built, they will incorporate many of these features into their design. The F-Market extension on the Embarcadero is being constructed with signal priority, and as an exclusive transit guideway. The Third Street light rail line will be configured similarly. Current initiatives in this program are:

- Signal priority for motor coaches – Muni has tested one system, and intends to procure a signal priority system that will be usable for all modes
- Bus Stop Improvement Program – Construction of bus bulbs along Mission Street
- Financial District – Construction of a passenger boarding island at Bush & Battery, and installation of a special Muni only turn signal at First Street & Howard.

F. Passenger Fares

The largest single operating revenue source for Muni is passenger fares, which account for approximately 28 percent of total operating revenues. Muni's current adult base fare was established in 1992, and no changes have occurred since then, although some adjustments were made to other fare categories and to transfer rules. Fare policy for Muni is currently set by the San Francisco Board of Supervisors. Figure 12 outlines the current fare structure.

Figure 12 – Passenger Fares

Category	Regular Service	Cable Car	Monthly Pass
Adult (18-64)	\$1.00	\$2.00	\$35.00
Discount*	.35	2.00	8.00
Youth (5-17)	.35	2.00	8.00
Child (<5)	Free	Free	NA
Paratransit	(see page 26 for description)		

- * Seniors (65+) or disabled persons with valid ID
- Regular service includes all bus, streetcars and Metro services.
- Monthly Pass valid on all Regular Service and Cable Cars.
- Transfers are issued for every cash fare paid, and are valid for 1 ½ hours in any direction

Other fare instruments currently available include tokens, weekly passes, 1/3/7-day passports, special fares for Candlestick sporting events and special event service, and regional passes/tickets/transfers. For more information on passenger fares, their availability and restrictions, please see Muni's web page at www.ci.sf.ca.us/muni/fares or contact Muni at (415) 6SF-MUNI. A listing of token, pass and passport vendors is available at www.ci.sf.ca.us/muni/abvendors or contact Muni at (415) 6SF-MUNI.

1. Proposed Fare Adjustments

No fare adjustments are currently proposed. The City and County of San Francisco has chosen to increase General Fund support to Muni as an alternative to raising fares.

2. Proof-of-Payment Fare Collection

Proof-of-Payment (POP) is a fare collection system in wide use throughout the United States on light rail systems, such as Muni Metro. Muni first began POP fare collection in 1994 at the M-Ocean View line platforms on 19th Avenue at San Francisco State University (SFSU) and the Stonestown Shopping Center. POP was expanded in January 1998 to the new E-Embarcadero line when it was first opened. Muni expanded POP on August 22, 1998 to include all Muni Metro subway stations and the entire N-Judah line. Passengers with a pass, transfer or fare receipt can now board through any door of any car at these locations. Those passengers paying cash fares are required to enter at the front door of the lead car where the operator issues a fare receipt to each paying passenger. Random fare inspections are performed to enforce fare policies. A fine of up to \$250 can be issued to any passenger not possessing valid proof-of-payment.

The primary benefits of POP are decreased boarding times (reduced dwell times at stops) and reduction in operating costs by eliminating the need for an operator in the second car of multi-car trains. Other benefits include improved system security through the presence of fare inspectors.

Muni will expand POP to all Metro lines incrementally. The next line to be converted to POP will be the M-Ocean View line, expected in late 1999 or early 2000. Muni is also in the process of creating a civilian Fare Inspection force to take over inspection duties from the SFPD.

The initial experience with POP has been positive, with fare evasion rates averaging less than 1 percent per month. This is very low in comparison with other properties operating POP rail systems. A consultant is conducting an evaluation of POP implementation, which is expected to be available in Fall 1999. The evaluation will consider such concerns as POP's impacts on running times, revenues, and passenger acceptance.

3. Inter-operator Transfer Agreements

To integrate Muni service into the regional transit system, a number of inter-operator fare and transfer agreements have been established. The primary inter-operator fare instrument in use at

Muni is the Fast Pass, which may also be used on BART and Caltrain within San Francisco. Figure 13 outlines the major features of each inter-operator agreement in which Muni participates.

Figure 13 – Inter-operator Transfer Agreements

Transfer Type	Uses
Muni Fast Pass	In addition to providing unlimited rides on all regular Muni services, the Fast Pass is valid for trips taken within San Francisco on BART and Caltrain at no additional charge to passengers.
BART/Muni Single Ride Transfer	Available inside the fare gates at all San Francisco BART stations for the cost of one full-priced adult fare, BART riders get a two part transfer good for a trip from and to BART on Muni. The yellow ticket dispensed only at the Daly City BART station is dispensed for free, and is valid only for trips from and to the Daly City BART Station.
BART Plus	Allows unlimited rides on all regular Muni services for the half-month period for which the ticket is valid.
Muni Sticker	The Muni Sticker is available at an additional charge to users of the AC Transit Transbay Pass, SamTrans Monthly Pass, Golden Gate Transit Commute Book Tickets, and Caltrain Monthly Ticket. The Muni Sticker allows holders unlimited use of all regular Muni services.
Golden Gate Ferry Transfer	Provides ferry riders with a free trip on Muni away from and back to the ferry.
Vallejo Ferry Monthly Pass	Includes Fast Pass privileges at no additional charge

4. Translink

Translink is a regional fare coordination program, designed to develop one fare instrument that can be used on all of the region's public transportation services. The goal of the program is to make transferring between operators easier for riders through the use of a single fare instrument for multiple operators. Procurement is proceeding for a contactless "smart card" system, which the user will simply place in proximity to a card reader either onboard a vehicle or at a rail station.

A demonstration project using the smart card technology will take place on Muni and six other regional transit operators starting in fall 2000. Fare equipment to read the smart cards will be placed at the nine Muni Metro Stations, the Fourth & King Street Metro Station, (on LRVs to be used on the N-Judah line?) and on the fleet of 30 foot Orion buses, many of which serve BART or Metro Stations.

A thorough analysis of the Translink program will be made as part of the demonstration. Benefits to Muni of the Translink card could include:

- Provide a widely available substitute for cash and tokens
- Reduce the number of fare instruments used on Muni
- Reduce cash handling
- Provide ability to verify monthly fast passes
- Reduce fraudulent use of paper transfers
- Reduce operator involvement in fare collection
- Facilitate or be compatible with a barrier-free proof-of-payment system
- Improve collection of ridership data
- Speed boarding times
- Minimize fare collection equipment maintenance

The test is scheduled to begin in Fall 2000, and extend for six months using a select group of Muni passengers and employees. Translink could have significant operating cost impacts for Muni in the future, if the project continues beyond the demonstration phase. Muni will need to pay for every Translink transaction that occurs on a Muni vehicle or in a Muni station. The financial impact of this is not known at this time.

G. Regional Coordination

Muni participates in a wide variety of regional coordination projects, designed to make traveling around the region easier for the transit rider. Transit service in the San Francisco Bay Area is operated by a number of major carriers, as well as many smaller operators. The Metropolitan Transportation Commission (MTC) oversees the coordination effort, although many of the projects are performed under the aegis of the Regional Transit Association (RTA), which is an organization formed by the seven largest transit operators in the Bay Area to implement coordination projects.

Muni participates in the following projects in the categories shown:

1. Projects to Improve Service to the Customer

- Update Regional System of Routes and Transfer Points
- Translink Demonstration (see page 29)
- Paratransit Technical Assistance Program
- Interagency Paratransit Service Partners
- Transit Trip Planning and Regional Transit Database
- Regional Transit Marketing
- Commuter Check Program
- Regional Transit Guide Update
- Regional Transit Connection Clearinghouse – Ticket Distribution

- Regional Discount Card Improvements
- ADA Paratransit Eligibility Program

2. Increase System Efficiency Through Coordination of Specific Functions

- Coordinated Training
- Coordinated Maintenance
- Clean Fuel Bus Initiative
- Transit Labor/Management Workshop
- SamTrans service into San Francisco

3. Develop Sub-regional Coordination Agreements Between Connecting Agencies

- Incident response Planning
- Trans Response Plan
- Inter-operator Fare/Transfer Agreements (see pages 28-29)

IV. Capital Improvement Program

A. Description

This section presents Muni's 10-year Capital Improvement Program (CIP). The CIP reflects the capital investments necessary to maintain the existing system and to continue to deliver the services identified in the previous chapters. Muni's capital program includes vehicles, infrastructure, facilities and equipment.

The CIP is organized as a set of programs that represents the multi-year nature of our capital projects and the recurring cycles of many capital improvements, such as vehicle replacement and track rehabilitation projects. This set of programs reflects Muni's mission to provide a quality transit service to our customers.

B. Setting Priorities

Projects are prioritized using a four-step process that considers program criteria, specific project criteria, project schedule and readiness, and funding availability.

1. Program

CIP projects are first categorized by program. The programs are prioritized from fleet (highest priority) to planning (lowest priority) as listed in Figure 14. Muni service is based on a fleet of over one thousand vehicles. Replacing the fleet on a regular schedule is the most cost-effective way to provide quality service to Muni customers. The next element of quality service is the network of guideways and wayside infrastructure, including stops and platforms that the vehicles rely on. The fleet and infrastructure programs are supported by a system of operations, maintenance and administrative facilities. The facilities require appropriate equipment to service vehicles and infrastructure, and the facilities themselves must also be constructed, rehabilitated and maintained. Finally, planning must be done to coordinate these elements and to look forward toward service enhancements. Each CIP Program is discussed in greater detail in the sections that follow.

2. Project

Once capital projects are categorized by program, they are prioritized within the program based on the criteria listed in Figure 15. These criteria place highest priority on projects that are already committed, legally mandated, and/or address a specific safety need. This is followed by a criterion that reflects the degree to which the project supports the Strategic Plan 2000, including the Mission, Focus Areas and strategies (see pages 3-4). Next, projects are ranked according to whether they replace or rehabilitate an asset which is beyond its useful life, provides for the timely rehabilitation or replacement of an asset, or enhances or expands the current system.

3. Timing

When setting priorities for the overall CIP, the timing element, in terms of project schedule and readiness, is introduced. This set of criteria includes internal resource availability, and special circumstances, such as opportunities associated with combined procurements or construction activities that maximize cost effectiveness and/or minimize negative impacts on the community.

4. Funding

The fourth level of prioritization involves applying funding criteria and constraints to the projects. This includes adjusting capital priorities to take advantage of unique funding opportunities.

Taken together, these four levels of prioritization yield the capital priorities matrix presented in Figure 20. This table summarizes the cost of the projects included in each capital program and the funding sources identified to carry out the CIP from FY99/00 through FY08/09.

Figure 14 – Capital Program Descriptions

Fleet Program: Rehabilitation and replacement of Muni's vehicles. This includes both revenue vehicles, used to transport passengers (motor coach, trolley coach, light rail, historic light rail, cable car, paratransit), and non-revenue vehicles, used to support the revenue fleet and the system infrastructure.

Infrastructure Program: Rehabilitation, replacement and modification of rail, communications signals, overhead, subway, stations and cable car systems. Also includes adding and improving ADA-mandated Key Stops, additional accessibility improvements, and transit preferential streets.

Facilities Program: Develop, manage and maintain space for the operating, maintenance, administration and storage needs required to support Muni operations.

Equipment Program: Provides the tools needed for the continued operation of Muni's operations, maintenance and administrative functions. This program provides for the replacement or acquisition of such items as rail grinders, sand dispensers and computers.

Planning Program: Develops the needs assessments, studies and plans that are used by Muni to formulate and implement the programs in the SRTP and CIP.

Other Projects: A limited number of projects do not fit into the CIP programs as described above.

Figure 15 – CIP Project Criteria

Ongoing/Committed: Already under way or have explicit public commitments from direct action by PTC or Board policy.

Legally Mandated: Address specific legal mandates.

Safety Need: Address specific, identified hazards.

Direct S.P. Support: Directly related to a strategy described in the Strategic Plan 2000.

Indirect S.P. Support: Generally supports one or more of the strategies described in the Strategic Plan 2000.

Deteriorated Asset: Rehabilitation or replacement of an asset that is beyond its useful life.

Regular Replacement: The optimal rehabilitation or replacement of an asset at the end of its useful life.

Enhance Existing: Improves or enhances an existing asset or service.

New/Expansion: Increases service beyond current schedules or programs.

C. FY99/00-FY08/09 CIP

The FY99/00-FY08/09 Capital Improvement Program consists of 55 projects totaling \$2.29 billion. Figure 16 shows the distribution of funds by programs, with Figure 17 illustrating the sources of these funds.

Figure 16 – Total Funding By Program

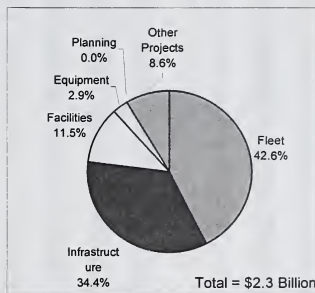


Figure 17 – Total Funding By Source

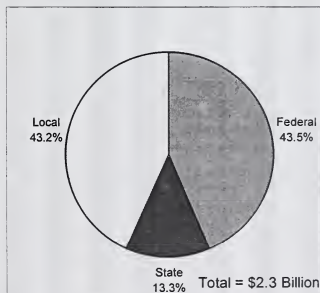


Figure 18 - Program and Project Priority

Project Name	Ongoing / Committed	Legally Mandated	Safety Need	Direct SP Support	Indirect SP Support	Deteriorated Asset	Regular Replacement	Enhance Existing	New / Expansion
Fleet Program									
Accessible Vans/Debit Card	✓	✓	□	□	□	□	✓	□	✓
LRV Procurement	✓	□	□	✓	□	✓	□	□	□
Motor Coach Rehabilitation Program	✓	□	□	✓	□	✓	□	□	□
Replace 465 MCs	✓	□	□	✓	□	✓	□	□	□
SLRV Rehabilitation	✓	□	□	✓	□	✓	□	□	□
Replace 273 Trolleys	✓	□	□	✓	□	✓	□	□	□
Historic Vehicle Program	✓	□	□	✓	□	□	✓	✓	✓
Cable Car Vehicle Renovation	✓	□	□	✓	□	□	✓	□	□
Alternative Fuels Demonstration	✓	□	□	□	□	□	□	□	✓
Non-Revenue Vehicle Replacement	□	□	□	□	✓	✓	✓	□	□
Infrastructure Program									
Metro Accessibility - Key Stops	✓	✓	□	□	□	□	□	✓	□
Advanced Train Control System	✓	□	✓	✓	□	□	□	✓	□
Rail Replacement Program	✓	□	□	□	✓	✓	✓	□	□
Metro Subway Signage	✓	□	□	□	□	□	□	✓	□
F-Embarcadero Extension	✓	□	□	□	□	□	□	□	✓
F-to-MMX Connection	✓	□	□	□	□	□	□	□	✓
Third St. Corridor Track/Vehicles	✓	□	□	□	□	□	□	□	✓
Metro Subway Improvements	✓	□	✓	✓	□	✓	□	□	□
TPS - Accessible Stops and Bulbs	□	□	✓	□	□	□	□	✓	□
Overhead Rehabilitation Program	□	□	□	□	✓	✓	✓	□	□
Cable Car Infrastructure Rehab	□	□	□	□	✓	□	✓	□	□
TPS - Signal Pre-emption 2	□	□	□	□	□	□	□	✓	□
Mission Bay TC Extensions	□	□	□	□	□	□	□	□	✓
Operator Restrooms	□	□	□	□	□	□	□	□	✓

Project Name	Ongoing / Committed	Legally Mandated	Safety Need	Direct SP Support	Indirect SP Support	Deteriorated Asset	Regular Replacement	Enhance Existing	New / Expansion
Facilities Program									
Woods Renovation (MC)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Potrero Rehab - Roof & Deck (TC)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Facility Pres./Imp. Program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Islands Creek Facility (MC)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Facility Mods for LRVs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
700 Pennsylvania Renovation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metro East LRV Facility	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1401 Bryant Overhead Lines Retrofit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Central Control Replacement	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fixed Facility Rehab./Kirkland Cleanup	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geneva Office Building Stabilization	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Revenue Center Replacement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Geneva/Green Capacity Mods (LRV)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Central Warehouse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fixed Facility Rehabilitation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Presidio Division Reconstruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Equipment Program									
Miscellaneous Equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data Processing & Office Equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Planning Program									
Short Range Transit Plan FY 2000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bayview Opera House Planning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other Projects Program									
Ferry Building Intermodal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Graffiti Prevention and Security	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transbay Terminal Replacement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 19 - Project Funding Priority

All \$ Amounts in 000s

Project Name	Through FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	10-Year Total	Project Total
Fleet Program													
Accessible Vans/Debit Card	\$4,196	\$2,100	\$2,213	\$2,350	\$2,425	\$2,546	\$2,674	\$2,807	\$2,948	\$3,095	\$3,095	\$26,252	\$30,448
LRV Procurement	\$403,990	\$22,148	\$22,823	\$23,207								\$68,179	\$472,169
Motor Coach Rehabilitation Program	\$6,056											\$0	\$6,056
Replace 455 MCs	\$72,953	\$31,832	\$19,477	\$17,082	\$17,051	\$17,250						\$119,943	\$192,896
SURV Rehabilitation	\$7,500											\$0	\$7,500
Replace 273 Trolleys	\$160,857	\$41,660	\$16,660	\$14,072								\$72,392	\$233,249
Historic Vehicle Program	\$5,778	\$3,400	\$2,352	\$124								\$5,876	\$11,652
Cable Car Vehicle Renovation	\$5,216	\$722	\$725	\$761	\$999	\$944	\$950	\$978	\$1,008	\$1,038	\$1,069	\$9,193	\$14,409
Alternative Fuels Demonstration	\$4,066	\$674										\$674	\$4,760
Non-Revenue Vehicle Replacement	\$2,887											\$0	\$2,887
Fleet Sub-Total	\$673,517	\$102,536	\$64,250	\$57,596	\$20,475	\$20,740	\$20,873	\$3,786	\$3,955	\$4,133	\$4,164	\$302,509	\$976,026
Infrastructure Program													
Metro Accessibility - Key Stops	\$14,979											\$0	\$14,979
Advanced Train Control System	\$69,504											\$0	\$69,504
Rail Replacement Program	\$39,898	\$15,943	\$9,375	\$9,375	\$9,375	\$9,375	\$9,375	\$9,375	\$9,375	\$9,375	\$9,375	\$100,318	\$140,216
Metro Subway Signage	\$675											\$0	\$675
F-Embarcadero Extension	\$67,278											\$0	\$67,278
F-to-MMX Connection	\$4,950	\$500	\$2,650									\$3,150	\$8,100
Third St. Corridor Track/Vehicles	\$40,780	\$99,722	\$134,432	\$65,275	\$13,946	\$11,054						\$324,428	\$385,209
Metro Subway Improvements	\$3,162	\$2,800										\$2,800	\$5,963
TPS - Accessible Stops and Bubs	\$1,595	\$2,144	\$610	\$640	\$670	\$700	\$730	\$767	\$805	\$845	\$845	\$8,755	\$10,351
Overhead Rehabilitation Program	\$15,871	\$6,250	\$6,250	\$9,375	\$9,375		\$3,125	\$2,188	\$9,375	\$9,375	\$9,375	\$64,688	\$80,558
Cable Car Infrastructure Rehab	\$2,590	\$500	\$1,000	\$5,000	\$5,000	\$5,000						\$16,500	\$19,090
TPS - Signal Pre-emption 2	\$2,222											\$0	\$2,222
Mission Bay TC Extensions	\$50											\$0	\$50
Operator Restrooms	\$2,374											\$0	\$2,374
Infrastructure Sub-Total	\$265,929	\$127,859	\$154,317	\$89,665	\$38,366	\$26,129	\$13,230	\$12,329	\$19,555	\$19,595	\$19,595	\$520,640	\$786,569

Project Name	Through FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	10-Year Total	Project Total
Facilities Program													
Woods Renovation (MC)	\$15,816	\$3,991										\$3,991	\$19,806
Potrero Rehab - Roof & Deck (TC)	\$1,895											\$0	\$1,895
Facility Pres./Imp. Program	\$7,950	\$6,193	\$5,467			\$7,500						\$19,160	\$27,110
Islands Creek Facility (MC)	\$22,976	\$15,828										\$15,628	\$38,604
Facility Mods for LRVs	\$5,364											\$0	\$5,364
700 Pennsylvania Renovation	\$20,500											\$0	\$20,500
Metro East LRV Facility	\$3,945	\$22,230		\$1,093	\$22,448	\$21,626	\$941					\$68,337	\$72,282
1401 Bryant Overhead Lines Retrofit	\$310			\$330	\$770	\$2,000						\$3,100	\$3,410
Central Control Replacement	\$75	\$2,760		\$5,650		\$7,500						\$15,910	\$15,985
Fixed Facility Rehab/Kirkland Cleanup	\$250	\$2,490	\$1,000									\$3,490	\$3,740
Geneva Office Building Stabilization	\$549											\$0	\$549
Revenue Center Replacement	\$923	\$827										\$927	\$1,850
Geneva/Green Capacity Mods (LRV)	\$19,364											\$0	\$19,364
Central Warehouse	\$0					\$7,500						\$7,500	\$7,500
Fixed Facility Rehabilitation	\$24,540											\$0	\$24,540
Presidio Division Reconstruction	\$100											\$0	\$100
Facilities Sub-Total	\$124,557	\$54,218	\$6,467	\$7,073	\$23,218	\$46,126	\$941					\$138,043	\$262,599
Equipment Program													
Miscellaneous Equipment	\$19,254	\$2,675	\$2,813	\$2,950	\$620	\$3,147	\$3,416					\$15,621	\$34,875
Data Processing & Office Equipment	\$9,645	\$1,931	\$1,989	\$2,048	\$2,110	\$2,173	\$2,238	\$2,306	\$2,375	\$2,446	\$2,446	\$22,062	\$31,707
Equipment Sub-Total	\$28,899	\$4,606	\$4,801	\$4,998	\$2,729	\$5,321	\$5,655	\$2,306	\$2,375	\$2,446		\$37,682	\$66,582
Planning Program													
Short Range Transit Plan FY 2000	\$103											\$0	\$103
Bayview Opera House Planning	\$50											\$0	\$50
Planning Sub-Total	\$153											\$0	\$153
Other Projects Program													
Ferry Building Intermodal	\$42,198	\$21,000										\$21,000	\$63,198
Graffiti Prevention and Security	\$2,539	\$2,500										\$2,500	\$5,039
Transbay Terminal Replacement	\$0				\$129,400							\$129,400	\$129,400
Other Projects Sub-Total	\$44,737	\$23,500			\$129,400							\$152,900	\$197,637
TOTAL CAPITAL FUNDS	\$1,137,792	\$312,719	\$229,835	\$159,333	\$214,188	\$98,316	\$40,699	\$18,420	\$25,885	\$26,174	\$26,205	\$1,151,774	\$2,289,566

Figure 20 - Fund Source Summary

All \$ Amounts in 000s

<i>Fund Source</i>	<i>Through FY99</i>	<i>FY00</i>	<i>FY01</i>	<i>FY02</i>	<i>FY03</i>	<i>FY04</i>	<i>FY05</i>	<i>FY06</i>	<i>FY07</i>	<i>FY08</i>	<i>FY09</i>	<i>10-Year Total</i>	<i>Funds Total</i>
FEDERAL													
Federal Congestion Mitigation	\$5,891	\$19,490										\$19,490	\$25,381
Federal Enhancement	\$3,050	\$2,941	\$678	\$750	\$670	\$700	\$730	\$767	\$805	\$845	\$845	\$9,730	\$12,780
Surface Transportation Program	\$30,989			\$9,400								\$9,400	\$40,389
Federal Emergency Management	\$4,693											\$0	\$4,693
FTA Section 23 Interstate Transfer	\$1,595											\$0	\$1,595
FTA Section 3 Bus/Alternative Fuels	\$23,839	\$1,250										\$1,250	\$25,089
FTA Section 3 Fixed Guideway	\$56,069											\$0	\$56,069
FTA Section 3 Rail Modernization	\$62,638											\$0	\$62,638
FTA Section 5307	\$126,941	\$47,870	\$47,995	\$51,713	\$37,739	\$55,370	\$30,631	\$12,278	\$18,164	\$18,306	\$18,331	\$338,399	\$465,340
FTA Section 5309	\$58,297	\$22,148	\$22,823	\$24,300	\$22,448	\$21,628	\$941					\$114,287	\$172,584
Federal Section 8 Planning	\$82											\$0	\$82
FTA Section 9 Formula Replacement	\$129,518											\$0	\$129,518
Subtotal Federal Funds	\$503,602	\$93,699	\$71,496	\$76,763	\$70,257	\$77,696	\$32,301	\$13,045	\$18,969	\$19,151	\$19,176	\$492,555	\$996,157
STATE													
Prop 108 Rail Bonds	\$55,396											\$0	\$55,396
Prop 116 Rail Bonds	\$38,971											\$0	\$38,971
Petroleum Violation Escrow Account	\$199											\$0	\$199
State CMAQ Match Reserve	\$191	\$88										\$88	\$279
Flexible Congestion Relief	\$3,553											\$0	\$3,553
State Gas Tax Revenues	\$6,000											\$0	\$6,000
State OA Surface Transportation Prog.	\$106,717	\$3,991										\$3,991	\$110,707
Other State -- Various Resources	\$1,478											\$0	\$1,478
State Regional Improvement Program	\$6,276	\$15,456		\$13,946	\$12,054							\$41,456	\$47,732
Transit Capital Improvement	\$38,153											\$0	\$38,153
Traffic Systems Management	\$786											\$0	\$786
State Underground Tank Program	\$0	\$990										\$990	\$990
Subtotal State Funds	\$257,719	\$20,524		\$13,946	\$12,054							\$46,524	\$304,243

Fund Source	Through FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	10-Year Total	Funds Total
LOCAL													
Bridge Tolls - AB 664	\$21,866	\$7,246	\$7,455	\$6,302	\$6,486	\$4,739	\$5,475	\$3,070	\$4,541	\$4,577	\$4,583	\$54,473	\$76,339
Bridge Tolls - Seismic Increase	\$0				\$110,000							\$110,000	\$110,000
San Francisco City General Fund	\$21											\$0	\$21
Helich Helchy Capital Reserves	\$1,207											\$0	\$1,207
Other Local -- Various Resources	\$34,147	\$21,000		\$0	\$10,000							\$31,000	\$65,147
Transportation Sales Tax -- Capital	\$229,525	\$160,566	\$142,433	\$71,269	\$770	\$1,000						\$376,038	\$605,563
Bridge Tolls - Regional Measure 1	\$19,235	\$500	\$2,650									\$3,150	\$22,395
Revenue Transfer In (from other source)	\$1,495											\$0	\$1,495
Revenue Transfer Out (to other source)	(\$1,495)											\$0	(\$1,495)
SF Muni Railway Improvement Corp.	\$27,561	\$1,500	\$1,000									\$2,500	\$30,061
Regional -- TDA/STA	\$1,336											\$0	\$1,336
Regional - AB 434	\$1,095											\$0	\$1,095
AB - 434 Program Manager Fund	\$220	\$365										\$365	\$585
Transit Impact Development Fee	\$24,759											\$0	\$24,759
Unfunded	\$15,500	\$7,318	\$4,801	\$4,998	\$2,729	\$2,827	\$2,923	\$2,306	\$2,375	\$2,446	\$2,446	\$35,169	\$50,668
Subtotal Local Funds	\$376,471	\$198,495	\$158,339	\$82,569	\$129,985	\$8,566	\$8,398	\$5,375	\$6,916	\$7,023	\$7,029	\$612,695	\$989,166
TOTAL CAPITAL FUNDS													
	\$1,137,792	\$312,719	\$229,835	\$159,333	\$214,188	\$98,316	\$40,699	\$18,420	\$25,885	\$26,174	\$26,205	\$1,151,774	\$2,289,566

D. Fleet Program

1. Description

The Fleet Program provides for the ongoing rehabilitation and replacement of Muni's vehicles. This includes both revenue vehicles, used to transport passengers (motor coach, trolley coach, light rail, cable car and paratransit), and non-revenue vehicles, used to support the revenue fleet and the system infrastructure.

The purpose of the Fleet Program is to determine the number and mix of vehicles Muni needs in order to meet its peak demand. This in turn drives the programming of funds for vehicle replacement and potential fleet expansions.

2. Revenue Vehicles

a. Vehicle Replacement Standards

Figure 21 below outlines the age at which vehicles of the various types should be replaced. This information establishes the replacement cycles for the Fleet Program.

Figure 21 – Vehicle Replacement Age

Mode	Replacement Age (years)
30' MC	10
Standard MC	12
Articulated MC	12
Standard TC	18
Articulated TC	18
SLRV	15
LRV2	25
HLRV (1)	NA
Cable Car (2)	90
(1) Rehabilitate every 15 years	
(2) Minor rehabilitation at 30 years, major rehabilitation at 60 years	

b. Replacement Schedule

Figures 22-24 provide a detailed inventory of each revenue vehicle fleet by mode and vehicle type, and includes a detailed replacement schedule.

Figure 22 - Fleet Plan

Fiscal Year 98/99 99/00 00/01 01/02 02/03 03/04 04/05 05/06 06/07 07/08 08/09

Motor Coach Inventory

Small Bus (30')

1990 - Orion	45	45	45	45							
2002 - New					25	25	25	25	25	25	25
Revenue Fleet	45	45	45	45	25	25	25	25	25	25	25
Peak Demand	35	35	35	35	20	20	20	20	20	20	20
Spare Ratio	28.6%	28.6%	28.6%	28.6%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
New Vehicles	-	-	-	-	25	-	-	-	-	-	-
Retired Vehicles	-	-	-	-	45	-	-	-	-	-	-
Avg. Vehicle Age	9.0	10.0	11.0	12.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0

Standard Bus (40')

1984 - Flyer	180	180	135								
1988 - New Flyer	50	50	50	50	25						
1989 - New Flyer	56	56	56	56	56						
2000 - NABI			45	45	45	45	45	45	45	45	45
2001 - Neoplan				135	135	135	135	135	135	135	135
2002 - New					45	45	45	45	45	45	45
2003 - New						81	81	81	81	81	81
Revenue Fleet	286	286	286	286	306	306	306	306	306	306	306
Peak Demand	228	225	225	225	240	227	227	227	227	227	227
Spare Ratio	25.4%	27.1%	27.1%	27.1%	27.5%	34.8%	34.8%	34.8%	34.8%	34.8%	34.8%
New Vehicles	-	-	45	135	45	81	-	-	-	-	-
Retired Vehicles	-	-	45	135	25	81	-	-	-	-	-
Avg. Vehicle Age	13.3	14.3	12.8	5.8	5.3	2.5	3.5	4.5	5.5	6.5	7.5

Articulated Bus (60')

1984 - MAN	100	100									
1991 - New Flyer	24	24	24	24	24	24					
2000 - Neoplan			100	100	100	100	100	100	100	100	100
2004 - New							24	24	24	24	24
Revenue Fleet	124	124	124	124	124	124	124	124	124	124	124
Peak Demand	101	101	101	101	101	101	101	101	101	101	101
Spare Ratio	22.8%	22.8%	22.8%	22.8%	22.8%	22.8%	22.8%	22.8%	22.8%	22.8%	22.8%
New Vehicles	-	-	100	-	-	-	24	-	-	-	-
Retired Vehicles	-	-	100	-	-	-	24	-	-	-	-
Avg. Vehicle Age	13.6	14.6	2.7	3.7	4.7	5.7	4.2	5.2	6.2	7.2	8.2

Motor Coach Summary

Revenue Fleet	455	455	455	455	455	455	455	455	455	455	455
Peak Demand	364	361	361	361	361	348	348	348	348	348	348
Spare Ratio	25.0%	26.0%	26.0%	26.0%	26.0%	30.7%	30.7%	30.7%	30.7%	30.7%	30.7%
New Vehicles	-	-	145	135	70	81	24	-	-	-	-
Retired Vehicles	-	-	145	135	70	81	24	-	-	-	-
Avg. Vehicle Age	13.0	14.0	9.9	5.8	4.9	3.3	3.7	4.7	5.7	6.7	7.7
SCE (Capacity)	493	493	493	493	498	498	498	498	498	498	498

Trolley Coach Inventory

Standard Trolley (40")

	Standard Wrecks (4%)										
1976 - Flyer	295	140									
1999 - ETI		110	110	110	110	110	110	110	110	110	110
2000 - ETI			130	130	130	130	130	130	130	130	130
Revenue Fleet	295	250	240	240	240	240	240	240	240	240	240
Peak Demand	213	213	188	188	188	188	188	188	188	188	188
Spare Ratio	38.5%	17.4%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%
New Vehicles	-	110	130	-	-	-	-	-	-	-	-
Retired Vehicles	-	155	140	-	-	-	-	-	-	-	-
Avg. Vehicle Age	23.0	13.9	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5

Articulated Trolley (60')

1994 - Flyer	60	60	60	60	60	60	60	60	60	60	60
1999 - ETI		33	33	33	33	33	33	33	33	33	33
Revenue Fleet	60	93	93	93	93	93	93	93	93	93	93
Peak Demand	45	45	70	70	70	70	70	70	70	70	70
Spare Ratio	33.3%	106.7%	32.9%	32.9%	32.9%	32.9%	32.9%	32.9%	32.9%	32.9%	32.9%
New Vehicles	-	33	-	-	-	-	-	-	-	-	-
Retired Vehicles	-	-	-	-	-	-	-	-	-	-	-
Avg. Vehicle Age	5.0	4.2	5.2	6.2	7.2	8.2	9.2	10.2	11.2	12.2	13.2

Trolley Coach Summary

Revenue Fleet	355	343	333	333	333	333	333	333	333	333
Peak Demand	258	258	258	258	258	258	258	258	258	258
Spare Ratio	37.6%	32.9%	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%
New Vehicles	-	143	130	-	-	-	-	-	-	-
Retired Vehicles	-	155	140	-	-	-	-	-	-	-
Avg. Vehicle Age	20.0	11.3	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5
SCE (Capacity)	385	390	380	380	380	380	380	380	380	380

Light Rail Inventory

Light Rail Vehicle

[illegible]

Light Rail Summary

Revenue Fleet	128	155	160	151	151	151	151	151	151	151
Peak Demand	90	106	106	106	124	124	124	124	124	124
Spare Ratio	42.2%	46.2%	50.9%	42.5%	21.8%	21.8%	21.8%	21.8%	21.8%	21.8%
New Vehicles	20	76	36	19	-	-	-	-	-	-
Retired Vehicles	13	49	31	28	-	-	-	-	-	-
Avg. Vehicle Age	17.1	9.7	6.6	4.5	5.5	6.5	7.5	8.5	9.5	10.5
SCE (Capacity)	256	310	320	302	302	302	302	302	302	302

Figure 23 - Cable Car Inventory

Car No.	Year	Manufacturer	Last Rehab	Notes
Powell Cars				
17	1887	Mahoney Bros.	1956	Undergoing Minor Overhaul
22	1887	Mahoney Bros.	1956	
24	1887	Mahoney Bros.	1958	
27	1887	Mahoney Bros.	1958	Undergoing Reconstruction
28	1887	Mahoney Bros.	1951	
23	1890	Ferries & Cliff	1970	Roof original 1890
25	1890	Ferries & Cliff	1976	
26	1890	Ferries & Cliff	1975	Candidate for Reconstruction
2	1891	Carter Bros.	1971	Roof/seats original 1891
3	1891	Carter Bros.	1955	
5	1891	Carter Bros.	1956	Roof/seats original 1891
6	1891	Carter Bros.	1965	Candidate for Reconstruction
7	1891	Carter Bros.	1957	Candidate for Reconstruction
8	1891	Carter Bros.	1958	
10	1891	Carter Bros.	1960	
11	1891	Carter Bros.	1977	
12	1891	Carter Bros.	1959	Undergoing Minor Overhaul
15	1891	Carter Bros.	1954	
20	1891	Carter Bros.	1968	Roof/seats original 1891
18	1962	SF Muni	NA	
14	1964	SF Muni	NA	
1	1973	SF Muni	1997	Roof/seats original 1887
19	1986	SF Muni	NA	
16	1990	SF Muni	NA	Roof original 1890
13	1992	SF Muni	NA	
21	1992	SF Muni	NA	
4	1994	SF Muni	NA	
9	1998	SF Muni	NA	
Total	28			
California Cars				
51	1906	W.L. Holman	NA	Candidate for Reconstruction
53	1906	W.L. Holman	NA	
54	1906	John Hammond & Co.	NA	
55	1906	John Hammond & Co.	NA	Candidate for Reconstruction
60	1906	John Hammond & Co.	1969	Undergoing Reconstruction
50	1910	CA St. Cable	NA	
56	1913	CA St. Cable	1984	
57	1914	CA St. Cable	NA	
58	1914	CA St. Cable	NA	
49	1992	SF Muni	NA	
52	1996	SF Muni	NA	
59	1998	SF Muni	NA	
Total	12			

Figure 24 - Historic Light Rail Vehicle Inventory

Car No.	Year	Manufacturer	Origin/Description	Operational	Last Rehab	Next Rehab
578	1895	John Hammond	Market St Rwy	Y		
1	1912	W.L. Holman	Muni's first car	Y		2002
189	1912	J.G. Brill Co.	Oporto, Portugal open car	N		
130	1914	Jewett Car Co.	Muni	Y		2002
C-1	1917	Municipal Rwy	Muni work car	Y		
106	1922	Colanna	Moscow/Orel, Russia	Y		
952	1923	Perley A. Thomas	New Orleans	Y		
798	1924	Market St Rwy	Muni	N		
351	1926	St. Louis Car	Johnstown PA	N		
578J	1927	Fuginagata	Kobe/Hiroshima	Y		
151	1927	Kawasaki	Hankei/Osaka	N		
1507	1928	Accaio	Milan - purchased 1998	N		2000
1515	1928	Accaio	Milan - purchased 1998	N		2000
1556	1928	Accaio	Milan - purchased 1998	N		2000
1793	1928	Accaio	Milan - purchased 1998	N		2000
1795	1928	Accaio	Milan - purchased 1998	N		2000
1814	1928	Accaio	Milan - purchased 1998	N		2000
1818	1928	Accaio	Milan - purchased 1998	N		2000
1834	1928	Accaio	Milan	Y		2001
1859	1928	Accaio	Milan - purchased 1998	N		2000
1911	1928	Accaio	Milan - purchased 1998	N		2000
496	1930	Melbourne	Melbourne semi-convertible	Y		
586	1930	Melbourne	Melbourne semi-convertible	N		
96	1931	Milan	Milan Interurban	N		
228	1934	English Electric	Blackpool "Boat" - open car	Y		2002
1050	1946	St. Louis Car	former SEPTA, Muni wings scheme	Y	1994	2009
1051	1946	St. Louis Car	former SEPTA, Muni simplified	Y	1994	2009
1052	1946	St. Louis Car	former SEPTA, LA Rwy scheme	Y	1994	2009
1053	1946	St. Louis Car	former SEPTA, Brooklyn scheme	Y	1994	2009
1054	1946	St. Louis Car	former SEPTA, PTC silver/cream	Y	1994	2009
1055	1946	St. Louis Car	former SEPTA, PTC green/cream	Y	1994	2009
1056	1946	St. Louis Car	former SEPTA, Kansas City scheme	Y	1994	2009
1057	1946	St. Louis Car	former SEPTA, Cincinnati scheme	Y	1994	2009
1058	1946	St. Louis Car	former SEPTA, CTA scheme	Y	1994	2009
1059	1946	St. Louis Car	former SEPTA, Boston MTA scheme	Y	1994	2009
1060	1946	St. Louis Car	former SEPTA, Newark PSCT scheme	Y	1994	2009
1061	1946	St. Louis Car	former SEPTA, PE Rwy scheme	Y	1994	2009
1062	1946	St. Louis Car	former SEPTA, Louisville scheme	Y	1994	2009
1063	1946	St. Louis Car	former SEPTA, Baltimore scheme	Y	1994	2009
2133	1946	St. Louis Car	SEPTA	N		
1704	1946	St. Louis Car	St. Louis	Y		2001
1006	1948	St. Louis Car	Muni - double ended	N		2001
1007	1948	St. Louis Car	Muni - double ended, Red Arrow scheme	Y	1994	2009
1008	1948	St. Louis Car	Muni - double ended	N		2001
1010	1948	St. Louis Car	Muni - double ended, Muni blue/yellow	Y	1994	2009
1015	1948	St. Louis Car	Muni - double ended, Illinois Term scheme	Y	1994	2009
3557	1951	LHB	Hamburg	N		2002
1040	1952	St. Louis Car	Muni (last PCC built in US)	Y		2001
Total	48					

c. Peak Vehicle Demand

Peak vehicle demand is the number of vehicles required to deliver scheduled service (the maximum number of vehicles in service during the course of a day). It is dependent upon such factors as route structure, ridership, headways, load factors, vehicle type and running time. As any of these factors change, the number of peak vehicles required may need to be adjusted accordingly.

Figure 11 in the Service Plan section of the SRTP shows the peak vehicle demand by mode for the past three fiscal years and ten fiscal years into the future. It also details the changes in peak vehicle demand, with a detailed description of the projects that result in changes in peak vehicle demand.

d. Spare Ratios

The revenue fleet spare ratio is the percentage of peak demand not in service due to repairs, maintenance or awaiting repairs or maintenance. Figure 21 below summarizes the desired spare ratio for each revenue vehicle fleet.

Figure 25 – Spare Ratio

Mode	Spare Ratio
Motor Coach	22-24%
Trolley Coach	20-25%
Light Rail Vehicle	20-25%
Historic LRV	33%
Cable Car	NA

3. Reserve Fleet

The reserve fleet is the vehicles used to provide backup to the electric modes: trolley coach and light rail vehicles. This fleet is made up of motor coaches that are beyond their retirement age, as required by FTA. Based upon historical needs, the reserve fleet has been established at 10 percent of peak demand.

4. Non-revenue Vehicles

Non-revenue vehicles are used to support the revenue fleet and the system infrastructure. It consists of staff cars, service trucks, specialty vehicles such as overhead line trucks and rail service vehicles, and equipment such as forklifts and pushers.

At this time a program for the regular replacement of the non-revenue fleet has not been established. In the coming months an inventory of the non-revenue fleet will need to be made, including the number of vehicles, their current location and age. From this information a non-revenue fleet plan will be developed.

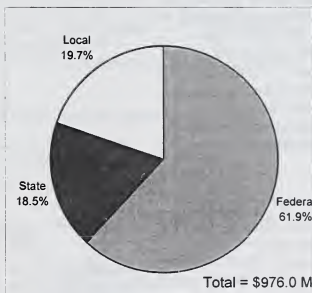
5. Paratransit Fleet

The paratransit fleet includes both van and taxicab vehicles operated by 15 service providers, including large van and taxicab companies, and smaller community-based van providers. Since paratransit service is entirely contracted out, the large majority of the vehicle fleet is under contract to Muni through its paratransit broker and multiple service providers.

Currently, there are approximately 854 vehicles available in a non-designated capacity in the taxi program, and 78 vehicles available in the lift van and group van programs. In addition, a small number of vehicles are owned by the city and provided to the paratransit program. In 1998, Muni conducted a federal procurement of 30 accessible minivans to expand the ramp taxi pilot program, and leased these vehicles to three taxicab companies to provide on-call accessible services to wheelchair users. Muni will be expanding this fleet to 60 accessible minivans and replacing vehicles on a four-year cycle as part of Muni's regular capital program.

6. Projects (all \$ amounts in 000s)

Figure 26 – Fleet Funding



Accessible Vans/Debit Card

Purchase of accessible vans to provide demand responsive paratransit service and to purchase revenue collection hardware and computer technology for the paratransit program.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$21,002	\$24,282	79.7%
Local	\$5,250	\$6,166	20.3%
Total Funds	\$26,252	\$30,448	100.0%
Project Cost		\$10,458	
Surplus (Shortfall)		\$19,990	

LRV Procurement - 8 Expansion & 128 Replacement

Purchase 128 LRVs to replace the 128 Boeing-Vertol SLRVs, which are rapidly aging and require excessive maintenance, and eight LRVs to be used for expansion service on the Muni Metro Extension.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$68,179	\$236,386	50.1%
State	\$0	\$145,192	30.8%
Local	\$0	\$90,591	19.2%
Total Funds	\$68,179	\$472,169	100.0%
Project Cost		\$472,169	
Surplus (Shortfall)		\$0	

Motor Coach Rehabilitation Program

Rehabilitation of some articulated motor coaches which were placed into service in 1984, and which will have to operate beyond their useful life of 12 years.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$0	\$3,330	55.0%
State	\$0	\$765	12.6%
Local	\$0	\$1,961	32.4%
Total Funds	\$0	\$6,056	100.0%
Project Cost		\$6,056	
Surplus (Shortfall)		\$0	

Motor Coach Replacement Program

Phased replacement of Muni's motor coach fleet of 455 vehicles. Some of these vehicles may be replaced with alternative-fuel vehicles. This program consists of a number of phases. Beginning in FY99/00, 45 new standard coaches will be delivered from North American Bus Industries (NABI). Also beginning in FY99/00, 100 new articulated coaches will be delivered by Neoplan, to replace 100 of the 1984 MAN articulated coaches. Finally, beginning in 2000, 135 new standard coaches will be delivered by Neoplan. The NABI and Neoplan deliveries will allow the retirement of all 180 1984 Flyer coaches. In 2002 Muni will procure 45 additional standard coaches. In 2003 Muni will replace 25 of the small coaches. Also in 2002, Muni will receive 81 standard coaches and 24 articulated coaches to allow for the retirement of the last of the 1988 and 1989 Flyers and the Flyer articulated coaches.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$90,000	\$141,742	73.5%
Local	\$29,943	\$51,154	26.5%
Total Funds	\$119,943	\$192,896	100.0%
Project Cost		\$177,898	
Surplus (Shortfall)		\$14,997	

SLRV (Boeing) Rehabilitation

Project will rehabilitate SLRV (Boeing) fleet to enable Metro to keep peak demand vehicles available for service, including ATCS operation, until full replacement with LRV2 (Breda) vehicles is complete.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$0	\$5,900	78.7%
Local	\$0	\$1,600	21.3%
Total Funds	\$0	\$7,500	100.0%
Project Cost		\$7,690	
Surplus (Shortfall)		(\$190)	

Trolley Coach Replacement - 33 Articulated & 240 Standards

Replace the fleet of 295 Flyer standard trolley coaches. Replacement of a number of standard trolley coaches with articulated coaches is needed to better meet heavy ridership demand on the 49-Van Ness/Mission, 30-Stockton, 45-Union/Stockton, 5-Fulton, and 22-Fillmore lines.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$63,562	\$172,274	73.9%
State	\$5,510	\$32,003	13.7%
Local	\$3,320	\$28,972	12.4%
Total Funds	\$72,392	\$233,249	100.0%
Project Cost		\$232,600	
Surplus (Shortfall)		\$649	

Historic Vehicle Program

Phased rehabilitation of the Historic Rail Car fleet. Rehabilitations are scheduled to occur every 15 years. Historic vehicles currently operate on the F-Market line and will be used on the F-Market/Embarcadero lines between Castro and Fisherman's Wharf via the Ferry Building when completed. Phase 0 will rehabilitate the 9 Milan cars; Phase 1 will rehabilitate 5 vehicles; and Phase 2 will rehabilitate 5 vehicles.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$5,474	\$5,580	47.9%
State	\$0	\$1,997	17.1%
Local	\$402	\$4,076	35.0%
Total Funds	\$5,876	\$11,652	100.0%
Project Cost		\$11,652	
Surplus (Shortfall)		\$0	

Cable Car Vehicle Renovation

Provides for the phased overhaul and reconstruction of the cable car fleet. Minor overhauls are scheduled at 30 years, major overhauls at 60 years and reconstruction at 90 years. At any one time a total of four cars can be in renovation.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$7,849	\$12,182	84.5%
State	\$0	\$125	0.9%
Local	\$1,345	\$2,101	14.6%
Total Funds	\$9,193	\$14,409	100.0%
Project Cost		\$14,305	
Surplus (Shortfall)		\$104	

Alternative Fuels Demonstration

To test the feasibility of new technologies for use in San Francisco's operating environment, Muni will procure and test in revenue service 2 Compressed Natural Gas (CNG) and 2 Diesel-Electric Hybrid buses. The results of the demonstration will be used to inform future bus replacements.

Fund Source	10-Year Total	Project Total	% of Total
Local	\$674	\$4,760	100.0%
Total Funds	\$674	\$4,760	100.0%
Project Cost		\$4,760	
Surplus (Shortfall)		\$0	

Non-Revenue Vehicle Replacement Program

Replacement and purchase of non-revenue vehicles, including service vehicles, sedans and rail maintenance vehicles.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$0	\$2,136	74.0%
Local	\$0	\$751	26.0%
Total Funds	\$0	\$2,887	100.0%
Project Cost		\$12,933	
Surplus (Shortfall)		(\$10,046)	

Expansion LRVs for JKLMN

This project provides for the purchase of 26 light rail vehicles to increase the level of service on the existing J-, K-, L-, M- and N-lines. A schedule and funding strategy for this project has not been developed.

E. Infrastructure Program**1. Description**

The Infrastructure Program consists of capital projects to build and maintain the infrastructure necessary to operate transit services. This program is primarily devoted to the modes that operate on fixed guideways, such as light rail, trolley coach and cable car, although some motor coach projects are also included. Projects in this program include rail replacement, communication and signaling, overhead power lines and power distribution systems, subway rehabilitation, station construction and rehabilitation and cable car system rehabilitation, replacement and modification. Adding and improving ADA-mandated key stops, additional accessibility improvements, and transit preferential street projects are also included in this program.

2. Current Inventory

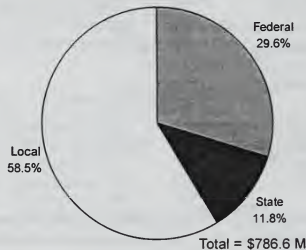
Muni maintains a complex network of operational infrastructure. This includes:

- 54.2 revenue track-miles for light rail operation

- 8.8 revenue track-miles for cable car operation
- 186.7 revenue line-miles of overhead wires for power supply for light rail and trolley coach operation
- 12.8 miles of track in subway (included in 54.2 miles of light rail track)
- 5.5 miles of subway
- 9 subway stations
- 6 surface light rail stations
- 21 substations for electrical power distribution
- Signaling, train control and communication systems
- 65 accessible boarding islands for LRVs/HLRVs, including Key Stops mandated by the ADA
- Bus bulbs system-wide

3. Projects (all \$ amounts in 000s)

Figure 27 – Infrastructure Funding



Metro Accessibility - Key Stops

Accessibility improvements on the Metro system and key station compliance with the ADA. Expansion of accessibility to key surface stops of the Metro system and provides for the development and installation of safety and security improvements to aid disabled Muni riders, and will support minor accessibility improvements to the Boeing SLRVs.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$0	\$7,960	53.1%
State	\$0	\$2,585	17.3%
Local	\$0	\$4,434	29.6%
Total Funds	\$0	\$14,979	100.0%
Project Cost		\$9,195	
Surplus (Shortfall)		\$5,784	

Advanced Train Control System (ATCS)

Modernize the signal system in the Muni Metro subway with a system that provides greater safety and allows for closer headways. It will involve the installation of wayside and on-board computers and upgraded Central Control computer equipment.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$0	\$30,700	44.2%
State	\$0	\$20,323	29.2%
Local	\$0	\$18,481	26.6%
Total Funds	\$0	\$69,504	100.0%
Project Cost		\$0	
Surplus (Shortfall)		\$69,504	

Rail Replacement Program

Phased design and replacement of the trackway and related systems serving the light rail lines.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$75,000	\$101,321	72.3%
State	\$6,568	\$13,993	10.0%
Local	\$18,750	\$24,902	17.8%
Total Funds	\$100,318	\$140,216	100.0%
Project Cost		\$137,970	
Surplus (Shortfall)		\$2,246	

Metro Subway Signage

The project will improve informational and pathfinder signage in Metro Subway stations.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$0	\$675	100.0%
Total Funds	\$0	\$675	100.0%
Project Cost		\$675	
Surplus (Shortfall)		\$0	

F-Embarcadero Extension

Construction of trackway and overhead for a streetcar line running along the median of The Embarcadero Roadway. It will provide an extension of the F-Market streetcar line from the base of Market Street to Fisherman's Wharf.

Fund Source	10-Year Total	Project Total	% of Total
State	\$0	\$28,093	41.8%
Local	\$0	\$39,185	58.2%
Total Funds	\$0	\$67,278	100.0%
Project Cost		\$79,500	
Surplus (Shortfall)		(\$12,222)	

F-to-MMX Connection

Design and construction of trackway which would provide a surface connection between the F-line and the Muni Metro Extension to 6th Street.

Fund Source	10-Year Total	Project Total	% of Total
Local	\$3,150	\$8,100	100.0%
Total Funds	\$3,150	\$8,100	100.0%
Project Cost		\$8,100	
Surplus (Shortfall)		\$0	

Third St. Corridor Track/Vehicles

Construct trackway and related facilities and purchase 15 light rail vehicles to provide new rail service to the Third Street Corridor.

Fund Source	10-Year Total	Project Total	% of Total
State	\$25,000	\$25,000	6.8%
Local	\$299,428	\$340,209	93.2%
Total Funds	\$324,428	\$365,209	100.0%
Project Cost		\$290,010	
Surplus (Shortfall)		\$75,199	

Metro Subway Improvements

Upgrade the subway emergency power, lighting and fire safety systems. First phase of project includes modifications for LRV2s.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$0	\$1,232	20.7%
State	\$88	\$588	9.9%
Local	\$2,712	\$4,143	69.5%
Total Funds	\$2,800	\$5,963	100.0%
Project Cost		\$6,500	
Surplus (Shortfall)		(\$537)	

TPS - Accessible Stops and Bulbs

Install bus stop improvements, such as bus bulbs and lengthened bus stops. It will also design and construct passenger boarding platforms throughout the Metro system at stops where passengers must board and alight in the street.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$8,755	\$9,592	92.7%
State	\$0	\$223	2.2%
Local	\$0	\$535	5.2%
Total Funds	\$8,755	\$10,351	100.0%
Project Cost		\$0	
Surplus (Shortfall)		\$10,351	

Overhead Rehabilitation Program

Phased design and replacement of the overhead wires and related traction power systems serving the LRV and trolley coach lines.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$51,750	\$65,150	80.9%
State	\$0	\$183	0.2%
Local	\$12,938	\$15,225	18.9%
Total Funds	\$64,688	\$80,558	100.0%
Project Cost		\$80,558	
Surplus (Shortfall)		\$0	

Cable Car Infrastructure Rehabilitation/Replacement

Includes various Guideway and Infrastructure projects on the Cable Car system.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$16,500	\$16,500	86.4%
Local	\$0	\$2,590	13.6%
Total Funds	\$16,500	\$19,090	100.0%
Project Cost		\$3,348	
Surplus (Shortfall)		\$15,742	

Metro Accessibility - Beyond Key Stations

TO BE DEVELOPED

TPS - Signal Pre-emption 2

Procure and install on-board and wayside signal pre-emption systemwide.

Fund Source	10-Year Total	Project Total	% of Total
State	\$0	\$2,004	90.2%
Local	\$0	\$218	9.8%
Total Funds	\$0	\$2,222	100.0%
Project Cost		\$2,222	
Surplus (Shortfall)		\$0	

41- & 45-Line Extension to Presidio

Extend the 41-Union and 45-Union/Stockton trolley coach lines into the Presidio National Park. A project schedule and funding strategy have not yet been developed.

Cable Car Extension to Fisherman's Wharf

This project involves the construction of an extension of the Powell/Mason cable car line to a new terminal inside the Fisherman's Wharf area. No schedule or funding strategy have been developed.

Mission Bay TC Extensions

Extension of two trolley coach lines into the Mission Bay area, and the purchase of the

Fund Source	10-Year Total	Project Total	% of Total
Local	\$0	\$50	100.0%
Total Funds	\$0	\$50	100.0%
Project Cost		\$0	
Surplus (Shortfall)		\$50	

additional trolley coaches needed to provide the new service.

Operator Restrooms

Continue the construction of Muni-only restroom facilities for Muni operators at transit terminals.

Fund Source	10-Year Total	Project Total	% of Total
Local	\$0	\$2,374	100.0%
Total Funds	\$0	\$2,374	100.0%
Project Cost		\$2,827	
Surplus (Shortfall)		(\$453)	

Third Street Phase II/Central Subway

Construct Phase II of the Third Street Corridor
Project: Central Subway to Chinatown.

F. Facilities Program

1. Description

Muni maintains a complex infrastructure of operational, maintenance and administrative facilities. Muni's Facilities Plan provides a detailed look at each facility, and their major functions, issues, problems and programs. The Facilities Program develops, manages and maintains space for the operating, maintenance, administration and storage needs required to support Muni operations. The emphasis is on maintenance and preservation projects with the major goals of enabling all facilities to operate in the most effective and efficient manner possible, while preserving older facilities until rehabilitated or replaced. Figure 22 gives a brief overview of the modes and functions at each facility. Figure 23 shows the location of Muni's facilities throughout the city.

Figure 28 - Municipal Railway Facilities – Modes and Functions

Operating Divisions		
Facility	Primary Mode	Major Functions
Green Division	Light Rail	LRV operating division, maintenance, heavy repair
Green Annex	Light Rail	Administrative, crew dispatch, electronic shop
Geneva	Light Rail	LRV and HLRV maintenance, paint shop
Geneva Office	Light Rail	Vacant (seismic damage – unsafe to occupy)
Metro East	Light rail	New LRV facility for Third Street light rail line <i>In design and engineering, expected to open in 2003</i>
Cable Car Barn	Cable Car	Cable car operating division, maintenance and administration
Potrero	Trolley Coach	Operating division, maintenance, heavy repair, paint shop, administrative, operational support offices
Presidio	Trolley Coach	Operating division, maintenance, heavy repair, administrative, operational support offices, revenue center, operator training

STRATEGIC PLAN 2000**SAN FRANCISCO MUNICIPAL RAILWAY**

Woods	Motor Coach	Operating division, maintenance, heavy repair, paint and body shops, cable car construction <i>Undergoing major rehabilitation in 1999</i>
Kirkland	Motor Coach	Operating division, running repair <i>To be vacated in 2002</i>
Flynn	Motor Coach	Operating division, maintenance, heavy repair
Marin Street	Motor Coach	Temporary operating division, running repair
Islais Creek	Motor Coach	Operating division <i>Under construction, expected to open in 2002</i>

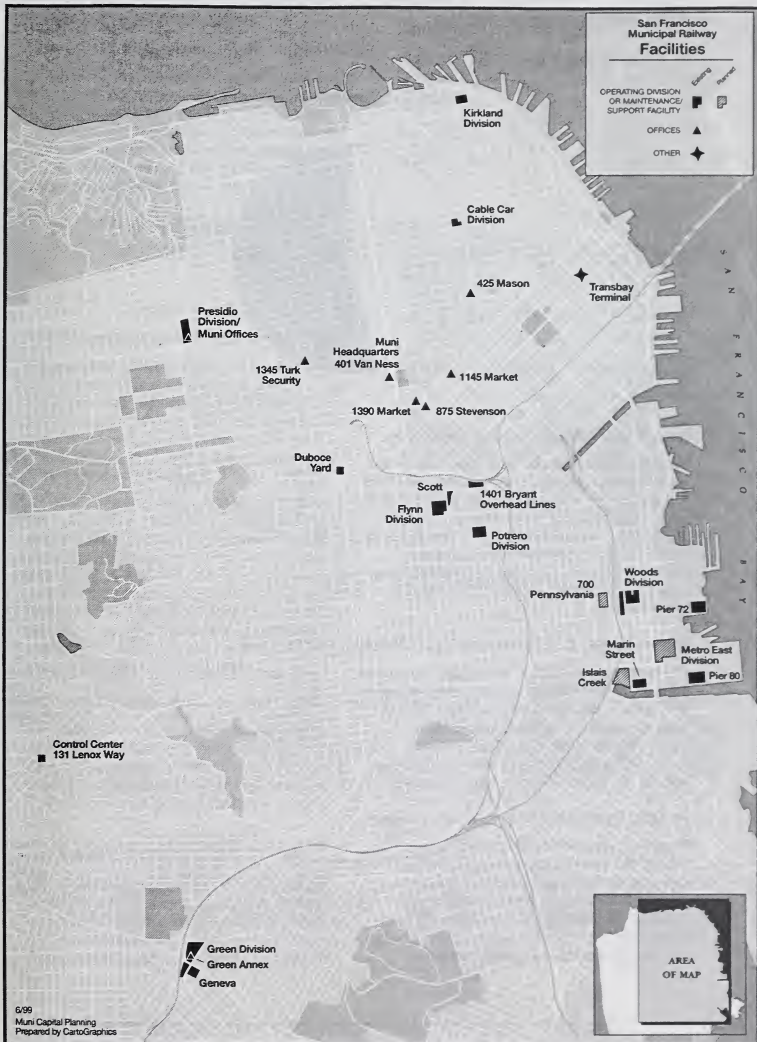
Support Facilities

Facility	Major Functions
Islais Creek	Temporary location for Track Department, Ways & Structures
700 Pennsylvania	Permanent site for support functions now at Islais Creek and Pier 80 <i>Under construction, expected to open in late-1999</i>
Scott Division	Non-revenue vehicle maintenance
131 Lenox Way	Central Control, Digital Shop
1401 Bryant	Overhead Lines Department, Motive Power
Duboce Yard	HLRV storage and rebuilding
Pier 80	Special machine shop, building repair shops, Ways & Structures
Pier 72	Long term storage
Central Warehouse	<i>Expected to move from Pier 72/Pier 80 to Seawall Lot at Marin Street site when funding is available</i>

Administrative Facilities

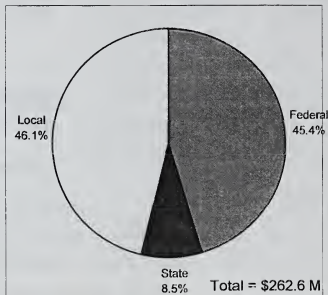
Facility	Major Functions
401 Van Ness	Muni Headquarters (Rented facility)
949 Presidio Ave	Administrative and operational support offices
425 Mason Street	Finance (Rented facility)
1145 Market	Capital Programs (Rented facility)
1390 Market (Fox Plaza)	Capital Programs (Rented facility)
1345 Turk	Muni Security <i>May be vacated in 1999, when these functions move to 875 Stevenson.</i>
875 Stevenson	MIS (Rented facility)

Figure 29



2. Projects (all \$ amounts in 000s)

Figure 30 – Facilities Funding

**Woods Motor Coach Division Renovation**

Consists of two phases. Fuel Island and Yard Improvements: replace underground fuel tanks and repave the bus parking yard. Paint & Body Shop Improvements: meet all environmental and health & safety requirements and to serve as the paint and body shop for all motor coaches. Functions normally performed here have been temporarily moved to the Marin Street facility.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$0	\$11,138	56.2%
State	\$3,991	\$3,991	20.1%
Local	\$0	\$4,677	23.6%
Total Funds	\$3,991	\$19,806	100.0%
Project Cost		\$22,179	
Surplus (Shortfall)		(\$2,373)	

Potrero Trolley Coach Division Rehabilitation - Roof & Deck

The current phase of this project will rehabilitate the deteriorated roof and parking deck structure to eliminate leaking conditions over interior work areas. Future phases will include improvements to the paint & body facility. Cost estimates for future phases are not complete and are not included in this project's scope.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$0	\$400	21.1%
Local	\$0	\$1,495	78.9%
Total Funds	\$0	\$1,895	100.0%
Project Cost		\$1,756	
Surplus (Shortfall)		\$139	

Facility Preservation/Improvement Program

This program includes a variety of projects to provide structural, ventilation and other improvements to Muni's existing operating, storage, maintenance and administration facilities. Includes protecting facilities from deterioration and correct safety hazards. Also, includes Elevator/Escalator Rehabilitation.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$7,500	\$7,500	27.7%
Local	\$11,660	\$19,610	72.3%
Total Funds	\$19,160	\$27,110	100.0%
Project Cost		\$41,177	
Surplus (Shortfall)		(\$14,067)	

Islais Creek Motor Coach Maintenance Facility

Develop a new operating division to replace the Kirkland motor coach operating facility when it is vacated for redevelopment in 2002. Will accommodate 165 standard motor coaches. Could be modified to accommodate up to 200 standard coaches or a combination of standard and articulated coaches, if the need arises.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$1,250	\$5,184	13.4%
State	\$1,378	\$3,958	10.3%
Local	\$13,000	\$29,462	76.3%
Total Funds	\$15,628	\$38,604	100.0%
Project Cost		\$38,603	
Surplus (Shortfall)		\$0	

Fixed Facility Modifications & Equipment for LRV2s

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$0	\$4,242	79.1%
Local	\$0	\$1,122	20.9%
Total Funds	\$0	\$5,364	100.0%
Project Cost		\$0	
Surplus (Shortfall)		\$5,364	

700 Pennsylvania Renovation

Renovate as a replacement facility to house the Structures & Ways section and Special Machine Shop previously at the 24th & Utah facility in order to meet Muni's long-term space requirements for maintenance functions.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$0	\$7,336	35.8%
State	\$0	\$3,204	15.6%
Local	\$0	\$9,960	48.6%
Total Funds	\$0	\$20,500	100.0%
Project Cost		\$23,008	
Surplus (Shortfall)		(\$2,508)	

Metro East LRV Facility

Development of a new maintenance facility for LRVs to relieve overcrowding at Green Division and to accommodate the growth in the LRV and Historic LRV fleets for the Third Street and F-Line service. This facility is currently in design and engineering and expected to open in 2003, when the Third Street light rail line opens. A second phase expansion would be needed to accommodate service expansion along existing lines and to the Central Subway.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$46,108	\$46,108	63.8%
State	\$0	\$500	0.7%
Local	\$22,230	\$25,675	35.5%
Total Funds	\$68,337	\$72,282	100.0%
Project Cost		\$131,645	
Surplus (Shortfall)		(\$59,363)	

1401 Bryant Overhead Lines Facility Seismic Retrofit

Rehabilitation and expansion of the facility which houses the Overhead Lines Department. This structure was constructed in 1893 and is required to be seismically strengthened by 2005 by the city's unreinforced masonry building code.

Fund Source	10-Year Total	Project Total	% of Total
State	\$1,000	\$1,000	29.3%
Local	\$2,100	\$2,410	70.7%
Total Funds	\$3,100	\$3,410	100.0%
Project Cost		\$0	
Surplus (Shortfall)		\$3,410	

Central Control Replacement / Communications / AVL-GPS

Design and construction of a new central control facility including mandatory replacement of systemwide radio communications system and new Automatic Vehicle Location/Global Positioning System technology. An internal

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$7,500	\$7,500	46.9%
State	\$2,000	\$2,000	12.5%
Local	\$6,410	\$6,485	40.6%
Total Funds	\$15,910	\$15,985	100.0%
Project Cost		\$101,500	
Surplus (Shortfall)		(\$85,515)	

staff analysis in 1999 recommended expansion of the current site over relocation. Expansion of the facility is needed in part to provide adequate facilities for Advanced Train Control System functions. The project will also include modifications to the Radio Communications System and addition of an AVL/GPS System.

Fixed Facility Rehabilitation - Kirkland Cleanup

Fund Source	10-Year Total	Project Total	% of Total
State	\$990	\$990	26.5%
Local	\$2,500	\$2,750	73.5%
Total Funds	\$3,490	\$3,740	100.0%
Project Cost		\$0	
Surplus (Shortfall)		\$3,740	

Geneva Office Building Stabilization

Seismic stabilization of the old Geneva Office Building to limit further deterioration. Original scope was to demolish building, but scope was revised in March 1999 to stabilize the building based on its historic significance. A reuse plan has not yet been developed.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$0	\$449	81.8%
Local	\$0	\$100	18.2%
Total Funds	\$0	\$549	100.0%
Project Cost		\$549	
Surplus (Shortfall)		\$0	

Revenue Center Replacement

Construct a replacement facility for the Revenue Center, which is currently housed in a site insufficient in terms of space, functionality and security.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$0	\$338	18.3%
Local	\$927	\$1,512	81.7%
Total Funds	\$927	\$1,850	100.0%
Project Cost		\$0	
Surplus (Shortfall)		\$1,850	

Geneva/Green LRV Facility Capacity Modifications Phases 1, 2, & Facility Preservation

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$0	\$4,767	24.6%
State	\$0	\$6,714	34.7%
Local	\$0	\$7,883	40.7%
Total Funds	\$0	\$19,364	100.0%
Project Cost		\$0	
Surplus (Shortfall)		\$19,364	

Training Center - Muni Wide

Central Warehouse

This project is intended to consolidate various parts & equipment storage locations into one central facility that would include indoor and outdoor storage. The preferred location for this facility is in the southeast waterfront area, near the cluster of Muni operating divisions.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$7,500	\$7,500	100.0%
Total Funds	\$7,500	\$7,500	100.0%
Project Cost		\$28,000	
Surplus (Shortfall)		(\$20,500)	

Municipal Railway Headquarters

This project is to purchase or construct an administration office building for Muni to consolidate dispersed administrative functions. No schedule or funding strategy have been developed.

Fixed Facility Rehabilitation

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$0	\$16,630	67.8%
Local	\$0	\$7,910	32.2%
Total Funds	\$0	\$24,540	100.0%
Project Cost		\$0	
Surplus (Shortfall)		\$24,540	

Cable Car Museum Renovation

This project would provide improvements to the Cable Car Museum, located at the Cable Car Barn at 1201 Mason Street. No schedule or funding strategy have been developed.

Presidio Trolley Coach Division Reconstruction

Rehabilitate and reconstruct the Presidio trolley coach storage and maintenance facility and administrative offices in order to increase capacity and to address structural and design problems with the facility. Joint development strategies may be pursued as part of the overall funding package for this project.

Fund Source	10-Year Total	Project Total	% of Total
Local	\$0	\$100	100.0%
Total Funds	\$0	\$100	100.0%
Project Cost		\$0	
Surplus (Shortfall)		\$100	

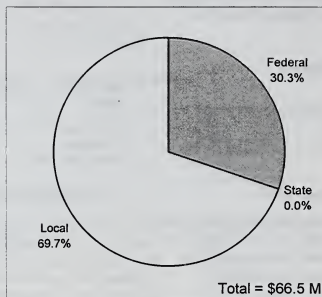
G. Equipment Program**1. Description**

The Equipment Program provides for the replacement or acquisition of the tools needed for the continued operation of Muni's operations, maintenance and administrative functions. This includes such items as rail grinders, sand dispensers and personal computers.

Muni is currently developing a system-wide Equipment Plan, which will identify the highest priority items that need to be included in the Equipment Program. This plan is expected to be completed in Summer 1999.

2. Projects (all \$ amounts in 000s)

Figure 31 – Equipment Funding

**Miscellaneous Equipment**

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$5,226	\$16,148	46.3%
Local	\$10,395	\$18,727	53.7%
Total Funds	\$15,621	\$34,875	100.0%
Project Cost		\$0	
Surplus (Shortfall)		\$34,875	

Data Processing & Office Equipment Program

Replacement and purchase of data processing and office equipment.

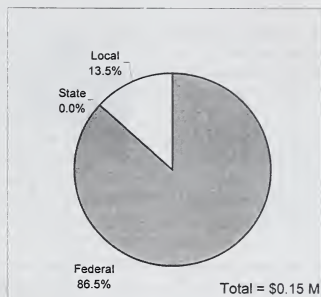
Fund Source	10-Year Total	Project Total	% of Total
Federal	\$0	\$4,002	12.6%
Local	\$22,062	\$27,705	87.4%
Total Funds	\$22,062	\$31,707	100.0%
Project Cost		\$0	
Surplus (Shortfall)		\$31,707	

H. Planning Program**1. Description**

The Planning Program develops the needs assessments, studies and plans that are used by Muni to formulate and implement the other programs in the SRTP and CIP.

2. Projects (all \$ amounts in 000s)

Figure 32 – Planning Funding



Short Range Transit Plan FY 2000

Preparation of the Strategic Plan 2000 and CIP update for FY 2000

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$0	\$82	80.0%
Local	\$0	\$21	20.0%
Total Funds	\$0	\$103	100.0%
Project Cost		\$0	
Surplus (Shortfall)		\$103	

Bayview Opera House Planning

Planning efforts in the Bayview Opera House, Oakland/Palou station area of the Third Street LRT project. This planning project is funded through the regional TLC program.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$0	\$50	100.0%
Total Funds	\$0	\$50	100.0%
Project Cost		\$0	
Surplus (Shortfall)		\$50	

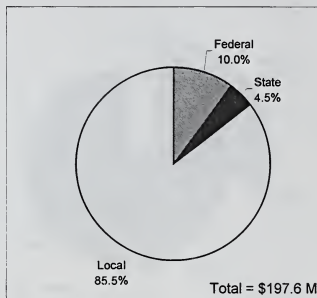
I. Other Projects

1. Description

A limited number of projects do not fit into the other CIP programs, and have been included here. Both the Ferry Building Intermodal and Transbay Terminal Replacement projects do not directly affect Muni's assets, but hold an interest to Muni in that they may have an impact upon the operating environment. At the current time the Graffiti Prevention and Security Program is placed in the other category since a study currently underway will determine the specific projects that will make up this program.

2. Projects (all \$ amounts in 000s)

Figure 33 – Other Projects Funding

**Ferry Building Intermodal**

Design, engineer, and construct improvements to the Ferry Building to restore the building to its original use as a transportation terminal connecting the region's ferry transit network with multiple modes of transit (Muni, BART and AMTRAK).

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$0	\$10,438	16.5%
State	\$0	\$8,812	13.9%
Local	\$21,000	\$43,948	69.5%
Total Funds	\$21,000	\$63,198	100.0%
Project Cost		\$0	
Surplus (Shortfall)		\$63,198	

Graffiti Prevention and Security Program**TO BE DEVELOPED**

Fund Source	10-Year Total	Project Total	% of Total
Local	\$2,500	\$5,039	100.0%
Total Funds	\$2,500	\$5,039	100.0%
Project Cost		\$0	
Surplus (Shortfall)		\$5,039	

Transbay Terminal Replacement

The replacement of the Transbay Terminal has been proposed for some time. Currently, a study is underway to determine the scope of the replacement project. Muni operates several lines to and from the terminal and has an interest in the outcome of the study. Current city policy directs that a replacement facility be built on the current site. A schedule and funding strategy have not yet been finalized.

Fund Source	10-Year Total	Project Total	% of Total
Federal	\$9,400	\$9,400	7.3%
Local	\$120,000	\$120,000	92.7%
Total Funds	\$129,400	\$129,400	100.0%
Project Cost		\$143,000	
Surplus (Shortfall)		(\$13,600)	

V. Operating Financial Plan

A. Description

For FY99/00, Muni's proposed budget is approximately \$375 million, or \$383 million including operating grants (see Figure 34). This is \$30 million, or 9 percent above last year's actual expenses. Muni's budgets have been increasing steadily for the last few years after almost a decade of flat or reduced funding, reflecting San Francisco's commitment to return Muni's funding to a level sufficient to operate all scheduled service.

While the last few budget years have seen large percentage increases, the 10-year average for Muni budget changes is approximately a 3.5% increase per year, which matches fairly closely the annual average Bay Area CPI increase of 3.2%. This indicates that Muni is just now returning to the minimal funding levels of ten years ago, to remedy the traditional underfunding of Muni that has occurred since the mid-1980s. This does not indicate that a large amount of additional resources are yet available to operate new or expanded services.

The Operating Financial Plan is a tool to project operating expenses and revenues over the next ten years. It can help policymakers see the implications of continuing current trends in spending or revenue policy. Figure 34 gives the actual financial information for the last two years, the estimated current year actual expenses and revenues, the proposed budget for next year, and projections for nine additional years.

B. Budget Process

Muni's operating budget is a component of the overall budget of the City and County of San Francisco. It is prepared by Muni staff, reviewed by the Mayor of San Francisco, and submitted by the Mayor to the Board of Supervisors for approval as part of the overall budget for the City and County of San Francisco.

The budget projections are prepared using the current year's budget as a baseline budget. In general, programs and funding can be shifted within the baseline budget, as long as the number of staff positions remains constant and the total dollar amount remains unchanged. After the baseline budget is agreed upon between Muni staff and the Mayor's Office, Muni staff propose enhancements to the baseline budget, which are any new programs or services that Muni would like to initiate. Additional positions must be added as enhancements.

The Mayor's Office submits Muni's proposed budget and enhancements, along with all other departments' proposed budgets, to the Board of Supervisors for approval. The Board adopts the final budget in September of each year.

C. Current Operating Expenses

Muni's operating expenses are the costs of providing transit services. By far, the largest components of these expenses are salaries and benefits, which account for approximately 70 percent of Muni's total budget. In FY98/99, Muni's expenses rose as Muni worked to provide full scheduled service.

D. Current Revenues

Muni's revenues are the sources of funds used to operate transit services, and they come from a variety of sources. The largest single source of revenue is passenger fares, followed by parking revenues from the City and County of San Francisco, San Francisco General Fund revenues, and state and local assistance, generated mainly through the State Transportation Development Act (TDA) sales tax fund and bridge tolls.

Muni's increased funding over the last few years has come primarily from increases in the City's General Fund contribution. Current revenues from passenger fares are flat, reflecting no changes to Muni's fare structure since 1992.

E. Changes From Previous Financial Plans

There are several major changes in this Financial Plan from previous Financial Plans. These changes are an attempt to more fully represent what the true costs of providing transit services are today, and what the costs are anticipated to be in the future.

1. Proposition B Operating Grants and Operating Projects

Proposition B, passed by San Francisco voters in 1989, imposed a ½ cent sales tax in the city to fund transportation capital improvements. Certain transit projects funded by Proposition B receive limited operating funds from the sales tax proceeds. These "Proposition B Operating Grants" provide funding for the incremental operating liability that Muni incurred as a result of the completion of such capital projects as the F-Market Streetcar line and the Muni Metro Turnback. These funds are limited and subject to the expenditure caps set forth in Proposition B.

For the first time, Proposition B Operating Grants and the projects that receive them are called out as revenues and expenses in the Financial Plan. It is important to call out these costs because Proposition B Operating Grants will begin to diminish substantially in FY00/01 and will no longer be available to abate the incremental cost of these new services. The costs generated by these operating projects will need to be funded as part of Muni's future operating budget.

Proposition B Operating Grants are used to fund portions of F-Market operation, N-Judah operation on the Muni Metro Extension, Muni Metro Turnback operation, trolley coach wheelchair lift maintenance, and other projects.

2. Service Changes

In the last update of the SRTP, Muni began showing projected operating costs for future major service changes as an added item outside of the projected budget. With this update of the SRTP, the Service Changes line item has been incorporated into the regular budget for future years, so that the projections can begin to account for the need to pay for future service expansions and changes that are planned or under construction, such as the Third Street Light Rail line. These significant costs will need to be covered as part of Muni's regular operating budget.

F. Proposed FY99/00 Budget

As noted above, the proposed FY99/00 budget is \$375 million, or \$383 million including current operating grants. This budget includes the additional operating costs for the F-Market extension from Market Street to Fisherman's Wharf along The Embarcadero as well as increases in

maintenance and operational support as part of a \$15 million, 27-point program to aggressively improve service delivery.

G. Projections

The projected budgets shown in the Financial Plan for FY00/01 through FY08/09 are constructed using the Mayor's proposed budget for FY99/00 as a baseline. Each line item is then adjusted in future years, based on assumptions which are noted below the plan.

These projections assume that the level of service that Muni provides does not change significantly over the life of the plan, except where a major service change is specifically identified. Also, this plan assumes that no fare increase occurs over the life of the plan. The City and County of San Francisco has chosen to increase General Fund support to Muni as an alternative to increasing fares.

Major service changes are assumed to increase operating costs based on anticipated additional net service hours. These operating costs are calculated based on actual costs by mode, as specified in the Muni National Transit Database (NTD) Report (FY97/98). The major service changes anticipated are all related to the Third Street light rail line and associated bus line changes. As specific service plans are developed for some of the future service change proposals described in Chapter III, this line item is expected to increase further. Service changes such as the Mission Bay trolley coach extensions will increase operating costs above the level currently projected, and will be included in this line item.

These projections portray a need to address an increasing imbalance between projected operating costs and revenue sources. Using the assumptions now in place, Muni's budget increases by approximately 41 percent over the next ten years, but the anticipated need for funding from San Francisco's General Fund increases significantly over the life of the plan, by 114 percent. This imbalance is largely due to the fact that fares are held constant and operating grants are reduced, while costs continue to rise. In addition, certain expenses such as Workers Compensation and the payments to BART for the use of the Fast Pass on BART increase at faster rates than the budget as a whole. Addressing the imbalance could take many forms, such as productivity efficiencies, cost-cutting measures, restructuring service, developing a phased, multi-year fare policy, or developing alternative, dedicated revenue sources. Muni's Strategic Plan 2000 will include some of these strategies, and others will be evaluated over the coming year.

Figure 34 - Financial Plan

All \$ in 000s													
	Actual FY98/99	FY97/98	Estimated FY98/99	Proposed FY99/00	FY00/01	FY01/02	FY02/03	FY03/04	Projected FY04/05	FY05/06	FY06/07	FY07/08	FY08/09
REVENUES													
Fare Revenues (1)	\$ 98,026	\$ 97,909	\$ 97,094	\$ 98,502	\$ 98,502	\$ 98,502	\$ 98,502	\$ 98,502	\$ 98,502	\$ 98,502	\$ 98,502	\$ 98,502	\$ 98,502
Misc. Operating Revenues (2)	3,779	4,307	4,433	6,933	7,500	8,300	9,600	11,000	11,385	11,783	12,196	12,623	13,065
Parking Revenues (incl. Pass-Throughs) (3)	78,698	83,598	87,403	98,450	100,616	102,828	105,092	107,404	111,163	115,054	119,030	123,246	127,562
State/Local Revenues - Gen. Opers. (4)	59,309	58,773	69,234	67,938	65,743	68,408	71,167	74,017	78,100	82,541	87,288	92,294	97,571
State/Local Paratransit Funding (3)	5,318	5,572	7,226	7,367	7,533	7,702	7,873	8,049	8,325	8,617	8,918	9,231	9,554
Other Rev. Tris. & Non Oper. Rev. (TIDF) (3)	12,085	4,536	5,090	4,883	4,990	5,100	5,212	5,327	5,514	5,707	5,906	6,113	6,327
General Fund Contribution	29,573	52,110	70,946	85,044	95,766	101,916	109,398	126,041	136,232	147,166	159,280	169,555	181,618
Approp. Fund Balance/Reserv. for Encumbrances	1,423	1,312	3,615	-	-	-	-	-	-	-	-	-	-
Intrafund Transfer In	-	-	-	5,769	5,896	6,026	6,158	6,294	6,514	6,742	6,978	7,222	7,475
SUBTOTAL REVENUES	\$ 287,411	\$ 308,117	\$ 345,041	\$ 374,886	\$ 386,546	\$ 398,783	\$ 412,993	\$ 436,633	\$ 455,735	\$ 476,111	\$ 497,149	\$ 518,768	\$ 541,673
Proposition B Operating Grants (5)	-	-	7,286	5,157	4,730	5,060	5,302	5,551	5,802	6,053	6,304	6,555	-
GRAND TOTAL REVENUES	\$ 287,411	\$ 309,309	\$ 352,327	\$ 383,043	\$ 391,276	\$ 403,843	\$ 418,795	\$ 438,184	\$ 457,167	\$ 476,841	\$ 497,569	\$ 519,120	\$ 541,673
EXPENDITURES													
Salaries & Fringe Benefits													
Platform Salaries (3)	\$ 92,562	\$ 95,785	\$ 96,941	\$ 99,267	\$ 101,451	\$ 103,693	\$ 105,964	\$ 108,295	\$ 112,085	\$ 116,008	\$ 120,069	\$ 124,271	\$ 128,621
Other Salaries (3)	82,442	88,874	100,994	106,399	108,740	111,132	113,577	116,076	120,138	124,343	128,695	133,199	137,861
Fringe Benefits (3)	39,273	46,087	48,917	51,223	52,350	53,502	54,679	55,882	57,837	59,862	61,957	64,125	66,370
Sub-total Salaries and Fringe Benefits	\$ 214,277	\$ 231,746	\$ 246,852	\$ 256,889	\$ 262,541	\$ 268,316	\$ 274,219	\$ 280,252	\$ 290,061	\$ 300,213	\$ 310,721	\$ 321,596	\$ 332,852
Other Operating Expenditures	7,385	9,283	7,783	7,783	8,016	8,257	8,505	8,760	9,023	9,283	9,572	9,859	10,155
Judgements & claims (6)	9,799	10,234	11,571	12,314	12,774	13,167	13,551	13,959	14,447	14,952	15,475	16,017	16,578
Paratransit contract (7)	5,612	6,572	7,406	7,716	8,873	10,204	11,735	13,495	15,520	17,848	20,525	23,603	27,144
Muni Fast Passes on BART (8)	-	-	-	-	-	-	-	-	-	-	-	-	-
Muni Metro Recovery Contract	9,867	10,065	13,282	12,589	12,866	13,149	13,438	13,734	14,215	14,712	15,227	15,760	16,312
Other contractual services (3)	20,869	22,518	32,377	34,303	35,058	35,929	36,617	37,423	38,733	40,088	41,491	42,943	44,446
Materials and supplies (3)	14,458	16,417	19,574	18,800	21,800	24,800	27,800	30,800	33,800	36,800	39,800	42,800	45,800
Workers' compensation (9)	9,733	9,029	11,024	11,788	12,047	12,312	12,583	12,860	13,100	13,376	14,258	14,757	15,274
Services of other departments (3)	2,825	1,018	3,903	6,660	6,807	6,956	7,109	7,266	7,520	7,783	8,056	8,338	8,629
Other operating/project expenses (3)	-	-	-	8,169	8,349	8,532	8,720	8,912	9,224	9,547	9,881	10,227	10,585
Intrafund Transfer Out/Pass-Throughs (3)	\$ 80,448	\$ 85,136	\$ 110,600	\$ 124,188	\$ 126,590	\$ 133,197	\$ 140,059	\$ 147,208	\$ 156,790	\$ 164,799	\$ 174,285	\$ 184,305	\$ 194,923
Sub-total Other Operating Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total Service Charges (10)	-	-	-	-	-	-	-	-	-	-	-	-	-
Expenditure Abatement/Recovery	(7,414)	(8,765)	(12,411)	(8,191)	(6,191)	(6,191)	(6,191)	(6,191)	(6,191)	(6,191)	(6,191)	(6,191)	(6,191)
SUBTOTAL EXPENDITURES	\$ 287,411	\$ 308,117	\$ 345,041	\$ 374,886	\$ 382,940	\$ 395,323	\$ 408,087	\$ 429,285	\$ 447,957	\$ 467,408	\$ 487,702	\$ 508,906	\$ 531,104
Prop B Operating Project Costs (3)	-	-	7,286	8,157	8,336	8,520	8,707	8,899	9,210	9,533	9,866	10,212	10,569
GRAND TOTAL EXPENDITURES	\$ 287,411	\$ 309,309	\$ 352,327	\$ 383,043	\$ 391,276	\$ 403,843	\$ 418,795	\$ 438,184	\$ 457,167	\$ 476,941	\$ 497,569	\$ 519,120	\$ 541,673

Assumptions

- Fare revenues not projected to increase over life of plan
- Miscellaneous operating revenues increase at contracted amount through FY 03/04, then inflated at 3.5% thereafter
- Inflated at 2.2% annually based on FY99-00 numbers through FY03/04, then at 3.5% through FY06/09.
- Service Change line item based on net increase in service hours anticipated for planned service changes, multiplied by NTD Section 15 operating cost per mode (inflated), less administrative costs.
- Future year assumptions based on MTC projections
- Estimated to increase 3% annually
- Paratransit expenditures increase at contracted amount through FY 03/04, then inflated at 3.5% thereafter
- Current agreement anticipated to continue through FY99/00. Estimated to increase at 15% annually
- Workers' compensation assumed to increase \$3 million annually
- Service Change line item based on net increase in service hours anticipated for planned service changes, multiplied by NTD Section 15 operating cost per mode (inflated), less administrative costs.
- Service Changes are detailed in Figure 10 in the Short Range Transit Plan (SRTP).

VI. Appendix

A. Ridership Statistics by Line

See Figure 35.

B. Productivity Improvement Program

The Metropolitan Transportation Commission (MTC) produces an annual Productivity Improvement Program (PIP) plan, which contains transit productivity projects developed in cooperation with the region's transit operators. These projects usually result from the Triennial Performance Review. For FY98/99, Muni's four PIP projects were as follows (some continued from previous reviews):

1. *Reduce the rate of unscheduled operator absenteeism*

- Establish standardized definition of unscheduled absenteeism 12/96
- Design computerized tracking/reporting system 2/97
- Analyze reports to identify problems and solutions 4/98
- Develop strategies to implement solutions 6/99

2. *Establish a Material Review Board program to coordinate parts issues*

- Commence weekly Material Review Boards in all shops 11/96
- Monitor availability of vehicles for parts issues 1/97
- Develop vendor monitoring and maintenance training program 3/99

3. *Ensure adequate staffing to perform grants management and capital financial functions, improve performance on financial management and control*

- Fill approved grants positions, set up section work plan, review and revise process for developing initial project budgets, develop agency-wide review of capital improvement program amendments 2/98
- Use MTC Financial Plan model for project implementation and funding projections. Link revenue projections of Finance and Capital budget units 6/98
- Fill any remaining grants positions, evaluate completed projects and programs, institute programmatic review of grant status 6/99

4. *Establish performance monitoring procedures for internal use and reporting on a system-wide basis*

- Establish comprehensive set of goals, objectives and standards as part of Muni's 1999 SRTP 7/99
- Identify performance indicators consistent with SRTP goals, objectives and standards, develop methodology for collecting and reporting data for each department on a regular basis 8/99
- Implement performance monitoring system, begin distribution of ongoing quarterly performance monitoring reports to departmental managers 9/99

C. Federally Mandated Programs

1. Title VI

The Title VI Compliance Program is monitored by the Federal Transit Administration (FTA), to ensure that the provision of transit service complies with Section 601 of Title VI of the Civil Rights Act of 1964. In order to be eligible for Federal funding, each transit operator receiving Federal assistance must document that the transit service provided to minority residents of the service area is generally equivalent to the transit service provided to non-minority residents, in terms of convenience, speed and geographic coverage.

Muni was audited for Title VI compliance in June 1998, and was found to be in compliance.

2. Equal Employment Opportunity

As part of the Federal Transit Administration's (FTA) Triennial Review process, each transit operator must document that the transit operator complies with Federal Equal Employment Opportunity (EEO) requirements.

Muni was audited for EEO compliance in January 1999, and was found to be out of compliance due to a failure to submit proper documentation. Muni has now submitted appropriate documentation, which is under review by the FTA.

Figure 35 - Line by Line Ridership Statistics

Line	Name	Mode	Route Type	Weekday	Wkdy Check	Saturday	Sat Check	Sunday	Sun Check
F	Market	LRV	Radial	7,896.3	11/4/97	7,128.5	10/4/97	no baseline	
K	Church	LRV	Radial	13,485.9	10/22/97	7,009.6	10/18/97	4,102.4	2/8/98
J	IngleSide	LRV	Radial	18,892.7	10/22/97	12,135.6	10/18/97	7,150.6	2/8/98
L	Taraval	LRV	Radial	29,665.4	10/22/97	13,084.6	10/18/97	9,906.9	2/8/98
M	Ocean View	LRV	Radial	29,739.4	10/22/97	14,357.1	10/18/97	8,940.9	2/8/98
N	Judah	LRV	Radial	37,366.4	10/22/97	17,031.4	10/18/97	11,850.5	2/8/98
1	California	TC	Radial	29,289.1	9/4/97	11,291.6	9/6/97	12,528.7	2/22/98
1AX	California A Express	MC	Express	970.3	3/4/98	-	-	-	-
1BX	California B Express	MC	Express	1,954.3	12/4/97	-	-	-	-
2	Clement	MC	Radial	6,884.3	3/27/98	policy		policy	
3	Jackson	TC	Radial	3,553.0	3/3/98	policy		policy	
4	Sutter	TC	Radial	4,518.0	3/3/98	-	-	-	-
5	Fulton	TC	Radial	16,049.0	9/27/97	9,245.5	9/6/97	8,876.2	5/3/98
6	Parnassus	TC	Radial	8,692.3	10/24/97	5,482.8	10/25/97	policy	
7	Haight	TC	Radial	5,745.2	10/17/97	3,519.3	11/10/97	policy	
9	San Bruno	MC	Radial	17,197.4	10/7/97	11,166.0	10/11/97	9,485.8	3/1/98
9X	San Bruno Express	MC	Express	7,987.3	4/15/98	-	-	-	-
9AX	San Bruno A Express	MC	Express	2,636.5	4/15/98	-	-	-	-
9BX	San Bruno B Express	MC	Express	2,213.4	4/15/98	-	-	-	-
12	Folsom	MC	Radial	3,710.9	6/5/98	-	-	-	-
14	Mission	TC	Radial	36,104.4	5/5/98	25,988.1	5/30/98	21,685.5	5/10/98
14L	Mission Limited	MC	Radial	5,192.9	6/10/98	6,605.4	5/30/98	-	-
14X	Mission Express	MC	Express	2,561.3	4/21/98	-	-	-	-
15	Third Street	MC	Radial	25,122.9	10/31/97	16,042.5	4/11/98	13,751.5	11/2/97
16AX	Noriega A Express	MC	Express	891.8	5/26/98	-	-	-	-
16BX	Noriega B Express	MC	Express	990.0	6/1/98	-	-	-	-
17	Park Merced	MC	Feeder	1,719.7	5/8/98	policy		policy	
18	46th Ave	MC	Crosstown	3,590.3	5/1/98	policy		policy	
19	Polk	MC	Crosstown	12,213.4	6/4/98	6,525.1	10/4/97	4,902.3	9/14/97
21	Hayes	TC	Radial	9,077.2	6/9/98	5,829.5	10/13/97	3,751.3	2/8/98
22	Fillmore	TC	Crosstown	20,643.0	5/8/98	15,391.3	8/10/97	13,634.5	11/2/97
23	Monterey	MC	Crosstown	5,680.0	12/10/97	policy		policy	
24	Divisadero	TC	Crosstown	13,933.7	10/23/97	policy		policy	
26	Valencia	MC	Radial	6,373.6	5/18/98	policy		policy	
27	Bryant	MC	Radial	10,336.3	12/4/97	policy		policy	
28	19th Ave	MC	Crosstown	13,327.8	11/25/97	9,282.5	10/25/97	6,935.0	4/26/98
28L	19th Ave Limited	MC	Crosstown	2,148.1	11/25/97	-	-	-	-
29	Sunset	MC	Crosstown	15,261.2	10/27/97	policy		policy	
30	Stockton	TC	Radial	25,079.3	3/24/98	29,873.5	1/17/98	19,650.4	8/31/97
30X	Marina Express	MC	Express	1,706.4	3/3/98	-	-	-	-
31	Balboa	TC	Radial	9,743.5	5/1/98	4,605.7	1/10/98	5,133.7	9/21/97
31AX	Balboa A Express	MC	Express	1,146.2	3/4/98	-	-	-	-
31BX	Balboa B Express	MC	Express	947.1	3/17/98	-	-	-	-
32	Embarcadero	MC	Feeder	1,417.5	3/10/98	policy		policy	
33	Stanyan	TC	Crosstown	5,903.9	4/23/98	policy		policy	
35	Eureka	MC	Feeder	1,133.8	2/23/98	policy		policy	
36	Teresita	MC	Feeder	1,754.6	4/8/98	policy		policy	
37	Corbett	MC	Feeder	2,276.0	3/25/98	policy		policy	
38	Geary	MC	Radial	28,144.0	5/20/98	32,651.2	9/20/97	26,230.4	9/14/97

Line	Name	Mode	Route Type	Weekday	Wkdy Check	Saturday	Sat Check	Sunday	Sun Check
38L	Geary Limited	MC	Radial	18,253.0	5/20/98	(incl w/ 38)		-	-
38AX	Geary A Express	MC	Express	1,153.5	3/4/98	-	-	-	-
38BX	Geary B Express	MC	Express	1,338.9	3/4/98	-	-	-	-
39	Coit	MC	Feeder	368.3	3/19/98	policy		policy	
41	Union	TC	Radial	3,572.4	3/27/98	-	-	-	-
42	Downtown Loop	MC	Crosstown	16,079.6	2/6/98	policy		policy	
43	Masonic	MC	Crosstown	16,096.7	2/11/98	policy		policy	
44	O'Shaughnessy	MC	Crosstown	13,827.4	2/4/98	6,802.7	1/17/98	5,612.6	3/1/98
45	Union/Stockton	TC	Radial	17,596.9	4/20/98	9,455.4	1/17/98	9,034.8	8/31/97
47	Van Ness	TC	Crosstown	5,995.7	4/8/98	policy		policy	
48	24th St	MC	Crosstown	11,222.0	3/2/98	policy		policy	
49	Van Ness/Mission	TC	Crosstown	19,502.1	2/26/98	policy		policy	
52	Excelsior	MC	Feeder	4,091.8	3/27/98	policy		policy	
53	Southern Heights	MC	Feeder	1,153.9	5/27/98	policy		policy	
54	Felton	MC	Feeder	6,290.0	5/18/98	policy		policy	
56	Rutland	MC	Feeder	249.6	6/3/98	policy		policy	
59	Powell/Mason	CC	Radial	10,731.6	8/5/97	9,522.4	8/2/97	8,636.0	8/17/97
60	Powell/Hyde	CC	Radial	10,590.4	8/5/97	9,781.6	8/2/97	8,909.2	8/17/97
61	California	CC	Radial	7,402.8	8/5/97	5,344.5	8/2/97	4,602.4	8/17/97
66	Quintara	MC	Feeder	1,193.1	4/30/98	policy		policy	
67	Bernal Heights	MC	Feeder	3,268.7	4/30/98	policy		policy	
71	Haight/Noriega	MC	Radial	10,706.7	10/16/97	8,883.8	10/25/97	policy	
71L	Haight/Noriega Limited	MC	Radial	2,105.3	10/16/97	-	-	-	-
76	Marin Headlands	MC	Radial	-	-	-	-	policy	
80X	Gateway Express	MC	Express	1,160.4	10/9/97	-	-	-	-
81X	Caltrain Express	MC	Express	907.2	10/9/97	-	-	-	-
82X	Levi Plaza Express	MC	Express	480.6	10/9/97	-	-	-	-
83	Pacific	MC	Feeder	1,907.7	5/18/98	3,346.9	1/17/98	3,105.4	8/31/97
88	Mission/BART Shuttle	MC	Express	757.7	10/16/97	-	-	-	-
89	Laguna Honda	MC	Feeder	183.8	3/3/98	policy		policy	
90	San Bruno Owl	MC	Owl	209.3	3/2/98	policy		policy	
91	3rd St./19th Ave. Owl	MC	Owl	461.8	3/3/98	policy		policy	
108	Treasure Island	MC	Radial	87.3	7/28/98	policy		policy	
	Policy	MC		-		97,101.4	Asstd.	66,675.4	Asstd.
	Policy	TC		-		39,595.1	Asstd.	36,741.6	Asstd.
	MC Total			301,043.6		198,407.5		136,698.4	
	TC Total			234,998.7		160,277.8		131,036.7	
	LRV Total			137,046.1		70,746.8		41,951.3	
	CC Total			28,724.8		24,648.5		22,147.6	
	SYSTEM TOTAL			701,813.2		454,080.6		331,834.0	

Figure 36

